

Additional chart coverage may be found in CATP2, Catalog of Nautical Charts.

SECTOR 11 — CHART INFORMATION

SECTOR 11

NEW ZEALAND—WEST COAST OF NORTH ISLAND, INCLUDING COOK STRAIT

Plan.—This sector describes the W shore of North Island from Cape Maria Van Diemen to Cape Palliser, and includes the narrative of Cook Strait. The description of Cook Strait includes the NE coast of South Island from Cape Farewell to Cape Campbell. The descriptive sequence is from N to S.

Caution.—A voluntary code of shipping routes around the New Zealand coast, to reduce the potential for pollution of the marine environment, has been introduced. For further information, see Pub. 120, *Sailing Directions (Planning Guide) Pacific Ocean and Southeast Asia*.

Cape Maria Van Diemen to Cape Egmont

11.1 Cape Maria Van Diemen (34°29'S., 172°39'E.), a promontory, 88m high, is located nearly 3.5 miles SW of Cape Reinga, which is described in paragraph 10.3.

Due to the great sand drift from the W, a large part of this coast is combined with fine yellow sand for some miles inland.

Pandora Bank, comprised of fine sand and which often breaks, lies centered about 5 miles SW of Cape Maria Van Diemen. This bank has a least depth of about 6m lying nearly 5 miles SW of the Cape. During strong S and W weather, seas break heavily over this bank and vessels should pass about 10 miles W to avoid the confused seas which develop.

During good weather, vessels may make a safe passage between Pandora Bank and the mainland, where there is a least depth of 29m.

Twilight Beach (34°30'S., 172°42'E.) projects 1.5 miles SSE from a position 2 miles ESE of Cape Maria Van Diemen. Vessels with local knowledge can obtain anchorage 1 mile off this sandy beach, in a depth of 30m, fine gray sand, protected from winds from the N to ESE. This anchorage is untenable with winds and swell from other directions.

Motupia Islet, which is rocky, is located about 11 miles SE of Cape Maria Van Diemen. Except in very good weather or with E winds, heavy rollers run into the channel between the islet and the coast. The Bluff, detached from the coast at HW, is a rocky promontory standing 7 miles SE of Motupia Islet. Hukatere, a prominent cone-shaped hill covered with scrub, stands 16 miles SE of The Bluff, and it has a forestry lookout upon its summit.

Ahipara Bay, entered about 15 miles S of Hukatere, has as its W entrance point Tauroa (Reef) Point. A reef that breaks projects 1 mile W from the point. North Ahipara Bank and South Ahipara Bank lie about 13.5 miles NW and 8 miles W, respectively, of Tauroa Point. Local vessels anchor, in a depth of 9m, sand, about 2.7 miles E of Tauroa Point and nearly 1 mile offshore. Ahipara Bay is sheltered from SW, SE and NE winds; but gales from the NE shift to NW.

Tides—Currents.—Tidal currents in Cook Strait run quite quickly attaining rates of 5 knots and upwards at springs. When the wind runs against the tidal currents, a troubled sea is raised, and with heavy gales the strait may be dangerous even for large vessels. The sea caused under these conditions is not

as heavy on the W as on the E side of the strait. Local vessels, when bound through the narrow part of the strait against a S gale, stay as much as possible in mid-channel and usually navigate during the last quarter of the S current.

High water on the W side of Cook Strait occurs about 5 hours later than on the E side, so that when it is HW on one side, it is nearly LW on the other. The tidal currents are occasioned by these differences in level. If in addition, meteorological conditions are such that mean sea level is raised on one side of the strait, then the flow from the other side will be considerably increased in strength and duration, while the flow from the other side is correspondingly reduced, or under extreme conditions, even reversed.

During NW or SE gales, or winds of long duration from other directions, the flow in the strait is affected by the drift current raised from them. The duration and rate of the NW flow will be increased, and those of the SE current correspondingly reduced by SE winds, while NW winds will have the reverse effect.

In the center of the narrowest part of the strait, between **Cape Terawhiti** (41°17'S., 174°37'E.) and Perano Head, N current begins 4 hours before HW on the shore in that part of the strait, and runs for 6 hours; the S current then runs for the same period. The rate of both currents is 1 to 3.5 knots, but during spring tides and gales, the current setting with the wind may attain rates of up to 5 knots. Heavy tide rips are experienced in this area, where there is an uneven bottom, depths varying from 160 to 400m, sand.

Off the shore between Cape Terawhiti and Sinclair Head, 7 miles SE, currents attain a rate of 5 knots during springs and after strong NW gales, the S current sometimes attains a rate of 6 knots. Tide rips project 2 or 3 miles off this shore. This shore should therefore be given a wide berth to avoid being set onto one of the detached dangers.

At the S entrance to Cook Strait, the N current begins 3 hours before HW on the shore in that part of the strait and runs for 6 hours. The S current runs for the same period.

A cold bottom current, probably from the S or sub-Antarctic, appears to run underneath into the deep submarine canyons of Cook Strait. This current is forced to the surface by meeting the steep slopes near the 200m curve. The forcing of this current to the surface may have some influence on the broken water experienced in Cook Strait as well as modifying tidal currents. Off **Turakirae Head** (41°25'S., 174°55'E.), there is a strong set WNW which projects for 2 miles to sea.

East of Sinclair Head and inside a line between it and Baring Head, the tidal currents are negligible and usually there is an eddy with the N current setting E along the shore towards the entrance to Wellington Harbor.

There are overfalls 6 to 7 miles SW of Sinclair Head and the heavy rips that occur during springs are dangerous to small craft.

The tidal currents in and around Cook Strait are unreliable, and masters are warned to exercise every precaution when

navigating in the vicinity. The currents often run in one direction for 8 to 10 hours; it has been found that the opposite current is much weaker and, in some cases, hardly noticeable. The maximum rates which are usually attained at springs are also liable to be experienced at any other time. In the vicinity of Karori Rock and Cape Terawhiti, a rate of up to 7 knots is frequently experienced, but as a rule it does not last for more than about an hour. Small vessels are warned to keep well clear of tide rips, as they may lose steerage way and may in extreme cases capsize.

Additionally, vessels are cautioned not to approach the land in thick weather, unless certain of their position. The influence of strong gales on the tidal currents is felt when the disturbance is from 24 to 48 hours away, and the influence of the current caused by the winds may prolong or retard the duration of the tidal current by up to 3 hours.

The tidal current 5 miles off Tauroa Point sets SSE before HW at Westport and NNW after HW, at a rate of about 0.2 knot, the stronger flow being closer inshore. Within Ahipara Bay, tidal currents are barely felt. A NW current of about 0.5 knot runs off Tauroa Point.

Herekino Harbor is entered about 9 miles SE of Tauroa Point, but it is small and dangerous and seldom used except by small craft in good weather with local knowledge. Over the N entrance point are sandhills dotted with green patches and from the S head, bare hills rise to a height of 244m continuing and increasing to over 335m high at Whangape, 5.5 miles SE, with a table-shaped summit and deep ravines than can be seen from sea.

Whangape is a small port with bold entrance heads that can only be used by small vessels with extensive local knowledge because of the ever changing channel over the bar. At Whangape, 2 miles within the entrance, there are three wharves with depths of 1.5 to 3.7m alongside.

Hokianga Harbor

11.2 Hokianga Harbor (35°32'N., 173°2'E.), the N port on the W shore of North Island, can be utilized by vessels of moderate tonnage with local knowledge. This harbor projects in a NE direction for about 20 miles between wooded ranges, whose steep sides approach the banks at distances of 4 to 10 miles. These mountain ranges are from 457 to 610m high, and Maungataniwha, the highest point of a sharp-peaked mountain, at the head of the Mangamuka River, is 655m high.

Fog or mist is experienced during night or early morning in the upper reaches of the harbor.

Tides—Currents.—On the outer coast, the flood current runs to the S while the ebb current runs to the N. About 3 miles offshore, the current's strength is 2 knots; about 6 miles offshore it attains a rate of 1 knot. In the entrance to the harbor tidal currents attain a rate of 3 to 4 knots. Inside the heads, the rate is 2 to 3 knots while in The Narrows it may be as much as 4 knots. The ebb current sets directly on to South Head and in leaving the harbor due allowance must be made for clearing it.

Depths—Limitations.—Hokianga Harbor is navigable by vessels of moderate draft for about 13 miles above the entrance to Kohukohu, about 1 mile above The Narrows and has few obstructions when inside the bar. Depths outside the bar decrease rapidly.

The bar is located about 1.5 miles outside of the heads of the harbor. Between the heads, within the bar, there are depths of 18.3 to 42m, but there are dangers on the N side of the channel which narrow it down considerably.

Caution.—The bar is liable to frequent change. It is dangerous for mariners without local knowledge to attempt to cross it. In 1980, there was a least depth of 5.2m in the channel across the bar, about 1 mile WNW of South Head.

11.3 West side.—North Head (35°31'S., 173°22'E.) represents the end of conspicuous yellow sandhills forming the S tip of the W side of Hokianga Harbor. Vessels approaching Hokianga Harbor should take care to ensure the proper latitude, that is, by positively identifying North Head, as the appearance of this port from sea greatly resembles those of other small ports N. South of North Head, no sandhills are to be seen till S of Maunganui Bluff, which falls abruptly to the sea 18 miles SE of Hokianga Harbor. On a fairly clear day, Maunganui Bluff will be seen from a vessel approaching from the N or W long before reaching the entrance to the harbor. The old signal station stands on South Head.

The harbor bottom is primarily mud, except near the entrance, where Middle Bank is composed of hard sand. For about 5 miles above the entrance the bottom is sandy, caused by the great sand drift from W.

White cliffs comprised of clay, 4.6 to 9.1m high, falling perpendicularly to the HW mark, are common to both sides of the river's banks. Large iron sandstone boulders project along the shore, with some of them nearly round and 9.1m high.

Northwest Reef, with a least depth of 2.4m, lies about 0.6 mile SW of North Head. A spit, with depths less than 5.5m, projects 0.5 mile S from North Head.

Middle Bank, with a least depth of 0.3m, lies in mid-channel and extends N for about 1 mile from a position about 0.5 mile ENE of North Head.

Kawehitiki Point lies on the W side of the harbor, 2.2 miles N of North Head. Rangi Point lies 1.5 miles N of Kawehitiki Point. A few buildings stand close S of Rangi Point.

Te Karaka Point, lying 3.5 miles NNE of Kawehitiki Point is the E entrance of Waireia Creek, which dries. Between Kawehitiki Point and Te Karaka Point, shoal water, with depths less than 4.9m, projects from the W shore of the harbor as far as the line joining the two points.

Gilbeys Rock, with a depth of 3m, lies in the center of the fairway, 0.6 mile SSE of Te Karaka Point.

Between Te Karaka Point and Motukauri Point, 1.5 miles NE, the harbor turns E. Matawhera Point, on the N side of the harbor, lies about 3 miles E of Motukauri Point, and it is steep-to. Motukaraka Wharf, which dries, lies 0.1 mile N of the E entrance point of the Tapuwae River, about 0.8 mile N of Matawhera Point. A church with a prominent spire, stands 0.1 mile NW of Motukaraka Wharf. Long Wharf, with a depth of 3.7m alongside, lies 1.5 miles E of Motukaraka Wharf. Shoal water projects from the shore to a line joining the two wharves.

The Narrows (35°23'S., 173°32'E.), 0.1 mile wide at their SW end, continue 0.7 mile NE where the harbor opens out again. Takataka Rock, from which a light is shown, lies 0.1 mile S of the N entrance point of the upper entrance to The Narrows. This rock is steep-to on its S side and is just covered at HW.

Kohukohu lies on the W shore of the harbor, 1 mile NE of Takataka Rock. There is a concrete wharf at Kohukohu, with a depth of 0.3m alongside. The center of the fairway, between Takataka Rock and Kohukohu, which shoals to a depth of 4.6m, lies about 0.3 mile from the W shore. There are depths of 3m very close to the fairway on either side. Off Kohukohu, the center of the fairway lies 0.2 mile off the wharf and has a depth of 8.8m, mud and sand.

Motiti, a low sandy islet, lies 0.5 mile NE of Kohukohu and marks the limit of how far up vessels can proceed. The Manga-muka River is entered between Kohukohu and Motiti.

11.4 East side.—Outer South Head (35°33'S., 173°22'E.) lies about 0.5 mile SSW of South Head, the S entrance point of the harbor. Three shoal patches, with depths of 13.7 to 16.5m, lie about 1.2 miles SSW of Outer South Head.

Waiarohea Stream (35°31'S., 173°23'E.) empties out into Hokianga Harbor, about 1.5 miles NE of South Head. Foul ground projects on each side of its mouth frequently causing a race. There is an L-shaped wharf at Opononi, 0.7 mile N of the entrance to Waiarohea Stream.

Koutu Point lies 2 miles N of Opononi Wharf. Mahena Island lies in a bay 0.7 mile NE of Koutu Point, with drying rocks between it and Kouwarre Point, 0.6 mile N.

Onoke Bank, with a least depth of 0.3m, projects nearly 0.5 mile offshore between Kouwarre Point and Onoke Point, 2 miles further NNE. A jetty, which dries, stands 0.1 mile E of Onoke Point. The entrance to the Whirinaki River lies 0.5 mile NE by E of Onoke Point; there is a depth of 0.3m in the river's entrance.

The Omanaia River is entered about 0.3 mile S of **Matawhera Point** (35°24'S., 173°29'E.). There is a depth of 1m in the entrance to the river. A drying bank projects about 1.5 miles SW from the E entrance point of the river. A ferry ramp lies on the E entrance point of the Omanaia River on which is the town of Rawene. Close W of the ferry ramp is Rawene Wharf, which is L-shaped, with depths of 0.9 to 1.2m alongside.

Motukiore Islet lies in the entrance to the Perunui River on the E side of the harbor, 0.5 mile SE of the N end of The Narrows. **Ruapapaka Islet** (35°21'S., 173°35'E.) lies in the entrance to the Waihou River, about 1.5 miles E of Motiti Islet.

Horeke Jetty, with a depth of 4.9m alongside, lies on the S bank of the Waihou River, about 0.4 mile SE of Ruapapaka Islet. Another jetty lies 0.2 mile E of Horeke jetty.

Anchorage.—Anchorage may be found by vessels with local knowledge, in depths of 5.5 to 7.3m, off **Opononi** (35°30'S., 173°23'E.), about 0.4 mile WSW of the wharf.

Larger vessels can anchor about 0.5 mile NW of the wharf, in depths of 11 to 14.6m. Additionally, there is anchorage, in depths of 5.5 to 9.1m, good holding ground, in mid-channel above Rawene.

Anchorage is prohibited within 100m of the submarine cable laid between the town of **Rawene** (35°24'S., 173°30'E.) and the shore NNE.

Anchorage may be found, in a depth of 8.2m, 0.2 mile SE of Kohukohu Wharf.

Anchorage is prohibited in the vicinity of the submarine cable that lies between 0.5 and 1.2 miles S of the Mangamuka

Bridge, situated about 7 miles above the entrance to the Manga-muka River.

Overhead cables, with a minimum clearance of 31m above MHWS, span The Narrows about 0.2 mile above their S entrance.

Directions.—A vessel with local knowledge approaching Hokianga Harbor should bring South Head to bear 100° and cross the bar on this bearing. The most opportune time for entry is at half flood. Should the first of the ebb be making and the bar appears passable, it should be kept in mind that there is a tidal current running at a rate of 4 knots to contend with, that sets on to South Head.

The bar generally breaks and a continual swell from W breaks on the beach. Vessels should be prepared when crossing the bar for shipping a sea; three rollers are usually experienced before the bar is passed. Often, the lapse of an hour may make the bar unworkable, and although the weather inside may be perfectly calm, a heavy sea may be running on the bar.

On account of the frequent changes of the bar, information should be secured in advance at some other New Zealand port; a telegram to the harbormaster at Hokianga will secure the latest bearings for the channel.

Vessels should pass South Head at a distance of 244m, when South Head bears 180° she should steer to make good a course of 116° until South Head bears 261°, and when she should change course NE and make good a course of 045°. Care should be taken to avoid the rocky foreshore surrounding South Head.

When North Head bears 282° vessels should change course N and head for Kawehitiki Point, bearing 006°, until Opononi Wharf bears 070°, she should haul slightly E and head for the center of Motukauri Point, bearing 018°, until abeam Te Karaka Point. This course passes 0.1 mile W of a drying rock near the entrance to Waiarohea stream and 0.3 mile off Opononi Wharf. A shoal W of Opononi is crossed in a depth of 4m. A deeper channel lies W of Middle Bank, but it is only about 0.1 mile wide. It has depths from 10 to 20.1m. This course also passes about 0.1 mile W of Gilbeys Rock.

From abeam of Te Karaka Point vessels should steer to make good a course of 352° until Onoke Point bears 066°; then steering for Motukauri Point, bearing 030°. When Onoke Point bears 140° a mid-channel course should be made until 0.2 mile SSE of Matawhera Point. From this position make good a course of 038° until Motukaraka Church Spire bears 310°, when course should be changed to head for the S entrance point of The Narrows, bearing 088°. Then steer a mid-channel course through The Narrows. From a position at the N end of The Narrows, 100m SE of Takataka Rock Light, make good a course of 053°; when Motiti Islet bears 010°, steer for it and this leads to the anchorage SE of Kohukohu Wharf.

Outbound vessels will find that after a bad bar it is generally the last quarter flood before it is fit to be worked. In such cases, the sea is usually very heavy on the first of ebb and vessels are not allowed to leave at this time. Vessels of more than 5.2m draft should not go below Opononi anchorage until 0.7 flood.

11.5 Maunganui Bluff (35°45'S., 173°34'E.) is a conspicuous, heavily-wooded landmark that rises immediately over the sea to a height of 483m, about 18 miles SE of Hokianga Harbor. Maunganui Bluff, can be distinguished a long distance

from seaward. The shore between Hokianga Harbor and the entrance to Kaipara Harbor, 64 miles SE, is comprised of cliffs bordered, except at the base of Maunganui Bluff, by a hard sandy beach. There is a break in the cliffs for 2 miles S from Maunganui Bluff, when they again commence and extend uninterruptedly in a straight line for 35 miles, or to within 8 miles of the North Head of Kaipara Harbor. These cliffs are topped with sandy hillocks which reach but a short distance inland, backed by a range of moderate height parallel with the coast.

The villages of Baylys Beach and Glinks Gully, lying about 14.5 and 24 miles SE of Maunganui Bluff, are conspicuous. At night, the lights from these villages provide useful marks on this otherwise featureless stretch of shore.

Kaipara Harbor

11.6 Kaipara Harbor (36°25'N., 174°09'E.), 28.5 miles SE of Maunganui Bluff, is one of the most extensive inlets in New Zealand. The entrance to Kaipara is encumbered with navigational hazards, as is the case with most ports on the W coast of North Island, but once within it affords good security for a number of vessels of moderate size. Kaipara Harbor should not be entered without extensive local knowledge.

The bar at the entrance is frequently shifting and depths shown on the chart cannot be relied upon. At various distances within The Heads, four rivers, the Wairoa River, the Otamatea River, the Oruawaru River, and the Kaipara River, branch off in different directions winding through some of the most fertile land in New Zealand. These rivers are navigable for many miles by vessels of moderate tonnage with local knowledge.

Tides—Currents.—The tidal currents outside of Kaipara Harbor follow the direction of the shore, setting S with the flood and N with the ebb. However, when the current strikes the outer banks, both currents set directly over them as well as through the channel.

The tidal currents vary in strength according to winds and freshets. These currents are strongest between Tory Shoal and North Sandspit, and off the N shore, until reaching the first white cliffs in the Wairoa River, when the influence of the Otamatea River and the Oruawaru River may be said to cease. Currents at springs may run at 5 knots, but during freshets and strong gales, attain rates of 6 or 7 knots. In the Kaipara River, up to the first anchorage, springs run 3 knots; above the first anchorage, springs run at not more than 2 knots.

In the upper parts of the Wairoa River, above the watering place, the current runs 3 knots and continues at that strength until near the head of the river. The tidal currents of the river follow the courses of the channels. Above Dargaville, a bore of considerable strength carries up the first of the flood, breaking upon the N bank.

Winter fogs are common, especially in the Wairoa River. These fogs usually first appear on the flats, but quickly extend to the river. Additionally, they generally develop at night, clear a few hours after sunrise and may be dense at times.

Depths—Limitations.—The bar channel lies between the W end of North Spit and the W extremity of Outer Southern Shoal. The shoals bordering the entrance channel shift. South of North Head, Tory Shoal, which breaks except in very good weather, is extending W. Outer Southern Shoal and the exten-

sion of North Spit break only in moderate to rough weather. The bottom is very irregular, the depths varying from 5.8 to 45.7m, and there is a very heavy breaking sea during W gales.

The Kaipara River is entered between South Head and Te Ngaio Point, 3 miles NE, and has a least depth of 1.1m. This river is best navigated near LW when the banks are uncovered. Helensville lies at the head of navigation of the Kaipara River; there are some small wharfs there.

The Wairoa River is full of shifting sand banks with a channel between. In 1964, vessels drawing less than 3.7m could proceed up to Ruawai, situated on the E bank of the river 16 miles above Pouto.

The Otamatea River is entered between **The Bluff** (36°16'S., 174°15'E.), lying 7 miles NNE of Pouto Point and a point 1.2 miles E. This river is navigable for vessels with local knowledge of 500 grt to the loading ground where there is a depth of 4.6m. There is a jetty at Tinopai, lying about 0.5 mile ENE of The Bluff.

The Arapaoa River empties out into the Otamatea River, on the N side, and the Whakaki River, on the S side, about 3.5 miles above The Bluff. The Arapaoa River can be used by vessels with local knowledge with drafts to 5.2m, but they will be aground at LW.

The Oruwharo River is entered between Motukamara Point, a narrow point 52m high, and a steep scrub-covered hill, 125m high, 0.7 mile S. The town of Port Albert lies about 7 miles E of Motukamara Point.

Aspect.—A good lookout should be maintained from the masthead for the breakers on North Spit and Southern Shoals, which will usually be seen long before the distinctive features of the land are visible. Good marks for identifying the entrance to Kaipara Harbor are the shifting sand hills inland of North Head, which has patches of scrub on their ridges and end abruptly in a sand cliff on their seaward side. The land S of Kaipara Harbor is higher than that N. Pukitu, a large green triangular tuft, will be seen on the top of a shifting sand range, lying 5 miles S of South Head Light. In clear weather, dark hills on the E shores of the harbor mouth will be seen through the entrance.

Mount Wakahurangi (36°19'S., 174°18'E.) a conspicuous peak, 145m high, is located at the entrance to the Oruawharo River, 8 miles NE of the heads.

The old lighthouse, lying 3.5 miles E of North Head, is a white tower, 12m high, with a white cupola. A flagstaff, 27.4m high, stands in front of Pouto.

South Head is a red cliff, 39m high, whose summit is tree-lined. This head can be passed at a distance of about 0.3 mile.

Aotea Cliffs, white, conspicuous, and 29m high, stand roughly 11 miles SE of South Head Light.

Pilotage.—Mariners intending to enter Kaipara Harbor should obtain the latest information from the Superintendent, Marine Department, Auckland before attempting to enter the port.

Because of the shifting nature of the shoals, mariners should head for the anchorage off Pouto, lying 2.7 miles NE of Kaipara Head, and try to obtain the services of an individual with local knowledge. In 1965, all buoys in Kaipara Harbor were withdrawn and channels were marked by beacons.

Anchorage.—Anchorage may be obtained by vessels with local knowledge, in depths of 12.8 to 16.5m, about 0.6 mile N of Aotea cliffs. Reportedly, this above anchorage is the safest in the river.

The recommended anchorages in the Wairoa River lie in the following places:

- a. 5.6 miles S of Pouto.
- b. 1.2 and 2.2 miles above Pouto.
- c. 1.5 miles N of Ru Point.
- d. 0.9 mile WNW of Sail Point.
- e. 0.8 mile off Ruawai.
- f. 0.6 mile SE of Dargaville Wharf, 0.7 mile below the road bridge.

Directions.—Kaipara Harbor should not be entered without extensive local knowledge. Vessels are cautioned against getting too close in to the land before daylight especially with a SW wind and swell. Except in an emergency, vessels should not anchor outside the heads. No vessel should cross the bar unless a safe anchorage can be found inside Kaipara Head, 4.5 miles E of North Head or South Head, before dark. Vessels entering should exercise caution after passing Tory Shoal, as both flood and ebb currents set toward the N shore. Many of the shoals lying above a line joining Kaipara and South Heads are frequently shifting and require extensive local knowledge for passage.

Rangitira Beach, which projects 24 miles SE from the S entrance point of Kaipara Harbor, is comprised of hard sand. This beach is backed by low sand hills, and at its S end is the town of Muriwai Beach. This town represents the only landmark on this otherwise featureless stretch of shore.

Caution.—Anchoring and fishing are prohibited in an area, best shown on the chart, off Rangitira Beach due to the presence of telegraph cables.

From Oaia Islet, lying 1 mile SW of Muriwai Beach, to Manukau Harbor the shore is rugged and cliffy broken only occasionally by sandy bays and beaches.

Lion Rock (36°57'S., 174°28'E.) lies about 7 miles SSE of Oaia Islet and fronts the town of Piha. About 1 mile S of Lion Rock the cliffs at Te Ahu Point rise to a height of about 213m, and about 1.5 miles SSE of the Point is Mount Zion, 294m high.

Manukau Harbor (36°55'S., 174°30'E.)

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11.7 Manukau Harbor (Onehunga Harbor) is an extensive inlet located on an exposed coast with a shifting bar, on which there are banks and shoals, extending 5 miles to seaward of the entrance covering an area of 152 square miles with a water-front of 240 miles, and provides access from the W coast to the Auckland District.

Using Wairopa Channel, access can be gained to the port of Onehunga. Papakura Channel gives access to Papakura and Drury. Waiuku Channel gives access to Waiuku. There is a cargo service between Onehunga and other New Zealand and Pacific Island ports.

Winds—Weather

The prevailing winds are from the NW to SW, and it seldom blows a gale from the S, the wind moderating as it draws from SW toward S.

Easterly gales are not frequent, and generally shift suddenly to the NW, in a violent squall, with very heavy rain, working to the W with a rising barometer.

A falling barometer indicates a change of wind to the N, with rain; but when it rises above 1016mb, say about 1026mb, and the land appears nearer than usual, a change of wind to the E may be expected. A clear, cloudless night is also an indication of a change being at hand, and if accompanied with heavy dew, the wind will in most cases come from the NE quarter; but when lightning is seen to the W, in dark, cloudy weather, a blow may be expected from the SW.

Tides—Currents

The tidal rise at Onehunga is 4.1m at MHWS; MLWN rise 3m.

On the outer coast the tidal currents set S with the flood and N with the ebb. The tidal currents on the bar attain rates from 1 to 2 knots. Within the inlet the currents, follow the direction of the channels running at a rate of 2.2 knots at springs.

There is a strong set towards the N bank soon after crossing the bar with the ebb. Otherwise, currents are not strong on the banks even when they are well-covered. In the narrow part of the channel off Paratutai, the currents run at a mean spring rate of 2.7 knots. Above Puponga Point, in both Wairopa Channel and Waiku Channel, the average rate at springs is 2.5 knots.

Depths—Limitations

Depths of water in the bar area are unstable. All vessels should contact Manukau Harbor Radio for the latest information. Depths shown on the chart cannot be relied upon and vessels should not attempt to enter without extensive local knowledge. The bar breaks in heavy weather.

The bar at the entrance to Manukau Harbor breaks with a slight W swell. Inside the bar the channels are generally plainly visible, except when there is no swell, as the banks on either side break. There are frequently large areas of disturbed water caused by the tide in the channel.

Mariners are cautioned that, as the depths on Manukau Bar are subject to frequent change, it is dangerous to attempt to cross it without local knowledge.

Middle Deep, located between North Bank and South Bank, leads from W into the harbor entrance off South Head. The seaward end of the deep is obstructed by Western Shoals, which lie on the outer part of the bar. Passage across this part of the bar may be practicable and may afford the better approach from time to time.

South Channel leads from S across the inner part of the bar into the harbor entrance, but does not maintain a constant depth and is not recommended by the Port Authority.

The Harbor Authority strongly advises against entry and departure at night.

The maximum acceptable draft is 4.9m.

There are small jetties at Cornwallis and Grahams Beach.

Inner channels.—In Manukau Harbor, E of **Puponga Point** (37°01'S., 174°36'E.), there is a junction where the four primary channels come together, being separated by sandbanks. Wairopa Channel projects along the N shore of Manukau, the N channel, is considered to be the most significant of the four.

Strong tide rips have been reported (1995) to extend at least 200m seaward between Puponga Point and Lady Bell Point.

Generally, these channels are straight and having dry banks on either side at LW, afford sheltered anchorage for those vessels with local knowledge. The sweeping flats between the four channels could be used by boats according to the tides, and, unlike the banks outside, the smoothest water is over them, with the tidal currents following the channels. The banks are usually covered after the first quarter flood, but their height vary. The bottom in all four of the channels is green sand and mud, good holding ground. The banks are comprised of soft mud, sand, and shells.

Wairopa Channel projects along the N shore of Manukau Harbor from E of Puponga Point roughly NE to Onehunga, a suburb of Auckland.

A flat projects about 0.5 mile offshore fronting the village of Cornwallis, which is situated on the shore between Puponga Point and Mill Point, nearly 2 miles NE. From abeam Mill Point there is a channel to Shag Point, 3 miles NE, with depths of 5.8 to 11m. Northeast of Shag Point, Wairopa Channel is separated into two parts by Motukaraka Bank. The S or primary channel to Onehunga is narrow with depths of 2.1 to 7.3m. Off Cape Horn, where the N and S channels rejoin, there is a least depth of 3.3m.

A wharf stands on the W side of Wairopa Channel, 0.6 mile N of Puponga Point. A monument, 115m high, stands 0.1 mile N of Puponga Point. Another monument stands about 1 mile NW of Puponga Point.

An oil pipeline crosses Wairopa Channel in approximate position 36°56'18"S, 174°45'24"E.

Onehunga Wharf, from which a light is shown, is 293m long, with dredged depths of 3.4 to 5m alongside the S side. The Mangere Bridge, and a connecting causeway, cross the harbor E of the wharf. Two conspicuous silos and a prominent pylon stand close W of the N end of the bridge.

Purakau Channel is entered about 1 mile E of Puponga Point, and it has a least depth of about 0.9m 6 miles NE from its entrance.

Papakura Channel is entered SE of Purakau Channel. This channel leads E for 12 miles to Te Pau, the N entrance of Pahurehure Inlet separated from Purakau Channel N, by Karore Bank and from the shore S, by Poutawa and Hikihiki Banks. This channel has depths ranging from 5.8 to 25.6m.

An LPG terminal is situated on the N side of Papakura Channel, 10.5 miles E of Puponga Point. The channel as far as the terminal is marked by lighted beacons.

Waiuku Channel is the S of four channels leading through Manukau Harbor.

Aspect

Whatipu (North Head) and South Head are easily discernible from sea. North of Whatipu, the land is covered by an exten-

sive forest, while that S, presents a bold barren face of brown sandy soil; with parts being scrub-covered.

When approaching from the W, the most prominent landmarks first visible include the three cone-shaped peaks near Whatipu. One of these peaks is the summit of Paratutai Islet, which is joined to Whatipu by a causeway.

Ninepin Rock, about 0.4 mile WSW of Paratutai Islet, is easily made out due to its cone-shaped appearance. Cutter Rock, white with an orange central patch, is 27m high and stands 0.3 mile N of Ninepin Rock. On the S side of the harbor entrance, about 2.2 miles S of South Head Signal Station, are some conspicuous trees.

Dry Rock, which dries 0.3m, lies about 0.3 mile N of the signal station, on the S side of the fairway.

Huia Banks (37°02'S., 174°35'E.), with a least depth of 4m, extends from a position close W of Puponga Point, about 2.5 miles WSW.

Pilotage

Pilotage is not compulsory for merchant vessels. However, if desired, arrangements can be made with the Harbormaster, Auckland to supply a pilot if required. Pilots will board vessels off Te Priau, located about 2 miles NE of South Head Main Light, S of Huai Banks. Whether or not a pilot is embarked, constant radiotelephone watch must be kept with the Officer-in-Charge, Onehunga, for traffic information, conditions in the harbor, and berthing instructions.

Signals

A signal station and mast stand on South Head, about 0.6 mile NNE of the main light. Communication can be established via VHF channels 10, 11, 12, 13, 14, and 16 (call sign ZLEF). Vessels equipped with radiotelephone must maintain contact with the signal station while working the bar. Weather conditions permitting, information regarding bar conditions will be supplied on request to the signal station. However, this information can only be used as a guide, as the station lies 5 miles from the bar and is 244m high.

Listening watches are maintained, as follows:

- 0800-0830—2012 kHz; 2182 kHz; VHF channel 16.
- 0830-0900—2012 kHz; VHF channels 11 and 16.
- 1800-1830—2012 kHz; 2182 kHz; VHF channel 16.
- 1830-1900—2012 kHz; VHF channel 16.

All other times are by arrangement.

Should a vessel be crossing the bar during the scheduled watch periods, the signalman will be working on 2012 kHz with that vessel and not listening on 2182 kHz or VHF channel 16.

A fixed red light, which may be observed upon rounding Puponga Point, lying 3.5 miles NE of the signal station, will be shown at night from the signal station when the bar is unsafe for vessels to proceed to sea. New Zealand authorities advise on observing this light that vessels should come to anchor.

Anchorage

Vessels with local knowledge after crossing the bar are not advised to anchor until after rounding Puponga Point, if pro-

ceeding to Onehunga; or after rounding Kauri Point, located 1.5 miles SE of Puponga Point, if proceeding to the S.

After rounding Puponga Point, vessels should pass W of Te Tau Bank, which lies between Wairopa Channel and Purakau Channel, where good anchorage can be found, in a depth of 7.3m, about 0.2 mile E of the head of Cornwallis Wharf (37°01'S., 174°36'E.).

The anchorage above **Cape Horn** (36°56'S., 174°44'E.) is wider than that close off the lower end of Onehunga, where there is a pool, with a depth of 7.3m. The usual anchorage lies about 1.5 miles below Onehunga Wharf, in a depth of 4.6m.

Anchorage may be found by vessels with extensive local knowledge at the E terminus of Papakura Channel within the heads at Te Pua, in a depth of 8.2m.

Anchorage is prohibited within 100m of a submarine pipeline laid in a 152° direction across Wairopa Channel, 1 mile W of Onehunga Wharf.

A prohibited anchoring and fishing area lies within an area projecting 2 miles from Destruction Gully front beacon, in a 182° direction, with a width of about 150m. Destruction Gully lies about 1.2 miles NE from **Paratutai Island** (37°03'S., 174°31'E.).

Anchoring and fishing are prohibited within an area adjacent to Auckland Airport which is situated N of Papakura Channel.

Directions

Vessels planning a voyage here are encouraged to contact the local authorities for the latest information and channel depths. On no occasion should a vessel attempt to enter or depart without contacting the signal station for information and advice; attempting to enter or leave after dark is not recommended.

In 1983, a vessel entering from seaward was advised to keep in depths of at least 37m to clear the banks extending up to 5.5 miles offshore. South Channel was entered from a position about 5 miles SW of South Head Light. A line of breakers, which breaks in moderate seas, lies 0.5 mile W and parallel to the channel.

The harbor entrance bar breaks with a slight W swell. Inside the bar the channels are easily seen, as the banks bracketing them break.

Outbound vessels are advised to keep on the N side of the fairway after passing Huia Banks.

Caution

A survey of South Channel was carried out by New Zealand authorities in 1991. Mariners are warned that the bar remains unstable, depths are liable to change, and the channel may be closed to vessel traffic. The Officer-in-Charge, Onehunga, and the Signalman, South Head, will advise mariners of the situation.

Depths over Western Shoals and in South Channel are obtained by periodic survey and are promulgated together with advice as to where the best water is to be found, in New Zealand Temporary Notices to Mariners; the latest notice should always be consulted before calling at Manukau Harbor. Copies of the surveys are available from the Harbormaster, Auckland, or from the Officer-in-Charge, Onehunga.

11.8 The Waikato River (37°24'S., 174°45'E.), one of the largest in New Zealand, rises in Tongariro Mountain near the center of North Island. This river has a shifting bar and is available only to small vessels with extensive local knowledge. The shore from the Waikato River, 24 miles NNW to South Head, is comprised of a bold, barren face of brown sandy soil covered in scrub.

The N entrance point of the Waikato River is made up of sand hills NE of which is forestland. The S entrance point is also formed of sand hills and rises steeply 0.7 mile inland to scrub-covered hills, about 166m high. The village of Port Waikato is situated on the S bank of the river, about 2 miles SE of the S entrance point.

Tides—Currents.—Tidal currents attain rates of 4 knots in the entrance, and 2.5 knots above Port Waikato.

Due to the changing nature of the bar and shoreline at the entrance to the river, the positions of the beacons cannot be depended upon.

Anchorage.—Vessels with local knowledge and drafts from 3 to 4m can obtain anchorage close in off Port Waikato. The bottom here is hard, coarse, black and white sand mixed with pumice, and under this is mud.

11.9 Rangitoto Point (37°48'S., 174°51'E.) stands about 22 miles SSE of the mouth of the Waikato River; it represents the N entrance point of Raglan Harbor. Kapiapia Rock, 6m high, is a black rock that is located about 14 miles NNW of Rangitoto Point and nearly 1.5 miles offshore. A rock, with a depth of 2.8m, was reported (1997) to lie about 2.6 miles SW of Kapiapia Rock.

Raglan Harbor (37°48'S., 174°50'E.) is entered between Rangitoto Point and a point 0.2 mile S. New Zealand authorities advise that the alignment of the directional light (leading through the entrance of the harbor) may be altered because of the periodical shifting of the main channel. Depths on the bar are subject to frequent change and it is dangerous for mariners without local knowledge to attempt to cross it. Mariners without local knowledge are advised to contact the harbormaster by radiotelephone, through Auckland Coast Radio Station (ZLD), before attempting to enter the harbor.

Tides—Currents.—Tidal currents within the heads attain a rate of from 2.5 to 4 knots. At the anchorage, 0.2 mile NNE of Raglan Wharf, a rate of 1.5 to 2 knots is experienced.

Depths—Limitations.—In approaching this harbor, the depths shoal from a depth of 14.6m, which is found about 2 miles offshore, to a depth of 1.4m on the bar; the channel then deepens to a depth of 6.3 between the heads, but close within them is an inner bar with a least depth of 2.7m.

The town of Raglan lies on the S side of the harbor on the E side of the mouth of the Opoturu River. Raglan Wharf, 45.7m long, with a depth of 3m alongside, lies at the NE corner of the town, about 0.4 mile SSE of **Tokatoka Point** (37°47.4'S., 174°52.6'E.).

Aspect.—Upon close approach, the entrance to Raglan Harbor can be identified by remarkable gray, bare, sand hills which rise from Rangitoto Point towards Horea, 149m high, 1 mile NE. The S entrance point to Raglan Harbor, which lies about 0.2 mile S of Rangitoto Point, is low, rising to South Head, 80m high, and grass-covered, 0.5 mile SW. A black post stands

on the S entrance point. A monument stands about 0.2 mile SE of the post.

Manu Bay lies about 1.7 miles SW of Rangitoto Point, and a swell usually breaks on the rocks in the bay. Tattooed Rocks, with a depth of 0.8m, stand off the E entrance of Manu Bay. Bryant Home, with a white gable and a conspicuous flagstaff, stands on a cliff 1 mile SSW of South Head.

A red beacon stands on a drying rock in the entrance to the Opoturu River, on the S side of the harbor, about 1 mile E of Rangitoto Point. Three prominent pine trees stand on the E entrance point of the river.

A submarine cable is laid across Raglan Harbor in a N-S direction, about 0.2 mile E of the entrance to the Opoturu River.

Raglan Wharf, with a length of 46m and alongside depths of about 3m, stands at the NE corner of the town.

Pilotage.—Pilotage is not compulsory. There is a part-time harbormaster.

Anchorage.—Vessels with local knowledge can anchor virtually in any part of this harbor. There is good anchorage 0.2 mile NNE of Raglan Wharf, in a depth of about 3.7m. Farther SE the holding ground is poor, mud over smooth rock.

Directions.—Raglan Harbor should not be entered without local knowledge. Contact the Harbormaster via VHF radio-telephone through Auckland Coast Radio Station (ZLD) before attempting to enter.

Generally, vessels do not proceed beyond Raglan Wharf, 2 miles within the entrance. When about 0.5 mile within the entrance, when the range lights on the S entrance point are in line bearing 234°, astern, steer NE, then head for Tokatoka Point Light bearing 056°, at night, keeping within the white sector. In 1978, there was a least depth of 2.4m on this track, 0.5 mile SW by W of Tokatoka Point. When about 0.2 mile from Tokatoka Point and when Raglan Wharf bears 128°, change course for the anchorage or the wharf.

11.10 Jackson Reef (Patuatini Rock) (37°53'S., 174°43'E.) is located about 1.7 miles NW of Papanui Point (Waipapa Point). This reef breaks in heavy W gales.

Gannet Island (Karewha), 13m high, and white with guano from the sea birds, is a wildlife sanctuary situated about 10.5 miles WSW of Papanui Point.

Tides—Currents.—Off this portion of coast the N current, with the flood from Cook Strait, meets the S current, with the flood from off Manukau Harbor, in the vicinity of Gannet Island.

Aotea Harbor (38°01'S., 174°48'E.) is entered about 8 miles S by E of Papanui Point, and it is used only by those vessels with extensive local knowledge. From sea the entrance to this restricted inlet appears as a large gap in the sand hills on either side. The river freshets, and W gales, possibly vary the configuration of the spit and depths in the channel, thus necessitating the use of a pilot.

Aotea Reef lies about 1.5 miles NNW of Potahi Point, the N entrance point of Aotea Harbor.

Tides—Currents.—Between the heads of Aotea Harbor, currents attain rates of 3 to 5 knots, and at the anchorage off the red cliffs, 1.5 miles E of Potahi, a rate of 2 to 4 knots.

11.11 Kawhia Harbor (38°05'S., 174°47'E.), which can only be utilized by those vessels with extensive local knowledge, is entered over a constantly shifting bar and between Tauratahi on the N side and Opapaka Point, 0.5 mile SW. Opapaka Point is 33.5m high with a conspicuous yellow patch on it.

The approach can be made out from sea by Pirongia Mountain, which is located 15 miles inland, rising in notched peaks to a height of 960m. There are depths of 5.5 to 16.5m between the bar and the town of Kawhia. Kawhia lies 2.2 miles ENE of Tauratahi, and there is a wharf there with a least depth of 3m alongside.

The entrance channel, between shallow or drying banks on both sides, is narrow and tortuous and had a least depth of about 2m in 1984, over a bar which lies 1.5 miles NW of Tauratahi Point. The bar is subject to unpredictable change and should not be attempted without recent local knowledge.

A dangerous wreck lies near the N side of the entrance to the channel.

Aspect.—The fairway to Kawhia is about 0.1 mile wide and it lies between sandbanks. The banks dry and are usually marked by tide rips.

Tides—Currents.—Tidal currents within the heads attain a rate of 3 to 5 knots and within the entrance of 2 knots. The ebb current sets in a WSW direction over South Bank, and the flood in the opposite direction. The flood within the entrance sets SE over the banks toward Te Motu island, 1.7 miles SE of Tauratahi. At Kawhia Wharf, the flood has been observed to continue for about 1 hour after HW. The ebb sets off the wharf.

Directions.—Kawhia Harbor should not be entered without extensive local knowledge.

Anchorage.—Vessels with local knowledge can obtain anchorage 0.5 mile above **Matatua Point** (38°04'S., 174°50'E.), in a depth of 7.3m.

Within Kawhia Harbor, when the tide is out, the channels leading to Oparau, Kauri, Awaroa, Rakaunui, and the Waiharakeke River are all plainly made out.

Small vessels with local knowledge can anchor in the S part of the harbor rounding Opapaka Point at less than 100m off, and keeping along the S shore for about 0.5 mile.

Approaching from the W, vessels should head for **Pirongia Mountain** (38°00'S., 175°08'E.) until Albatross Point shuts in the land S of it, when the vessel will be about 5 miles offshore. During SW winds and with the ebb, there is a heavy sea off Albatross Point; vessels should give it a wide berth.

No directions are given for crossing the bar as local knowledge is required. After crossing the bar, when Opapaka Point is abeam, a vessel should alter course as required for the N channel towards Matatua Point.

11.12 Albatross Point (38°07'S., 174°41'E.) is bare and steep, rising to 183m at Taungatara, about 0.3 mile S of the point. Albatross Point lies about 4.2 miles WSW of Urawhitiki Point and the shore between forms a bay where anchorage can be found, in depths of 7.3 to 14.6m, in good weather, with off-shore winds, sandy bottom. A black mooring buoy stands 0.7 mile ESE of Albatross Point.

Taharoa Ironsand Terminal (38°10'S., 174°41'E.) (World Port Index No. 55225) is situated 4 miles S of Albatross Point and is comprised of a Single Point Mooring (SPM), 11m in di-

ameter, painted orange, moored in a depth of 29.3m. Submarine pipelines connect the SPM to the shore E.

Taharoa Light is shown from a tower, painted red, 16m high, 3.5 miles SSE of Albatross Point. A fixed red obstruction light is shown from the tower. The pumping station stands 0.5 mile SSE of Taharoa Light. Close E of the pumping station is the ironsand stockpile and 4 prominent black towers about 20m high. Floodlights illuminate these towers at night. The port operations office, a small cream-colored building, stands on a sand hill at a height of 30.5m, 0.1 mile N of Taharoa. A framework tower, painted in red and white bands, stands close S of the office. A red light is occasionally shown from the tower.

Range beacons, in line bearing 158°, lead about 0.5 mile E of the SPM, and are shown from a position roughly 4 miles S of Taharoa Light.

An area prohibited to anchoring and fishing lies in close proximity to the SPM and is bound by the following approximate positions:

- The shore at 38°10'S, 174°42'E.
- 38°10'S, 174°40'E.
- 38°11'S, 174°40'E.
- The shore at 38°11'S, 174°42'E.

Vessels, other than those bound for the offshore terminal, should remain outside the limits of the port area.

Pilotage.—Pilotage is compulsory and pilots embark and disembark via helicopter. Vessels can be berthed by day and at night. Berthing during darkness is dependent on suitable weather.

Vessels arriving should turn towards the wind about 3 miles WNW of the SPM and await the pilot.

11.13 The shore between Albatross Point and Port Taranaki, about 69 miles SSW, is devoid of any anchorage or shelter, except in the small rivers which are used by small coasters with local knowledge in good weather.

Tirua Point (38°23'S., 174°38'E.), which shows as a yellow cliff from the N, lies about 17 miles S of Albatross Point. Tokamapuna Rock, awash, lies about 11.5 miles S of Albatross Point. Piritoki Reef stands about 1 mile N of Tirua Point. Whareorino Mountain rises to 648m, about 3 miles ESE of Tirua Point.

The Mokau River lies about 19 miles S of Tirua Point; the bar at its entrance has a depth of about 0.9m. Small local vessels can cross the bar under favorable conditions, and there is good anchorage within. The N entrance point of the river is comprised of sand dunes; the S entrance of cliffs. Epiha Rocks lie almost 0.2 mile W of the S entrance point, with foul ground between.

The shore S of the Mokau River is comprised of yellow sandstone cliffs, about 30.5m high, on which the constant action of the sea has produced a unique effect by isolating portions of projecting points, wearing them into pillars of incredible shapes.

White Cliffs (38°52'S., 174°33'E.), prominent and 243m high, stand about 10.5 miles S of the entrance of the Mokau River.

The Waitara River lies about 17 miles SW of White Cliffs; its entrance forms the S entrance point of North Taranaki Bight. The entrance points to the river are made up of dark rock which distinguishes them from the surrounding shoreline. At

night, the lights of the town of Waitara are a useful mark. A directional light is shown on a shed 0.6 mile inside the entrance to the river.

A bar, with a depth of about 0.6m, fronts the river's entrance, and no vessel should cross it without extensive local knowledge. The bar is sheltered from the prevailing SW swell by the reefs W, but it is exposed NW. Whenever there is a swell off the entrance, breakers occur on the bar. A directional light, showing white, leads over the bar into the river.

Tides—Currents.—Outside the bar, tidal currents set E with the flood and W with the ebb. They attain rates from 1 to 2 knots. In the entrance, the flood attains a rate of from 2 to 3 knots; the ebb attains a rate of from 3 to 4 knots.

Aspect.—An aero light is shown 2.5 miles WSW of the entrance to the Waitara River. Prominent radio masts, from which red obstruction lights are shown, stand about 3 miles SSW and 5.2 miles SW, respectively, of the entrance to the Waitara River.

Port Taranaki (39°03'S., 174°02'E.)

World Port Index No. 55210

11.14 Port Taranaki (New Plymouth) is one of the few harbors on the W shore of North Island that can accommodate a vessel of moderate size. The approach to the port is considered safe, easily navigable, and has no bar. The port is protected by breakwaters. Three wharves are situated to the W of the breakwaters. There is a sand bank around the head of, and along the main breakwater, which is liable to alteration and is being continually dredged.

Crude oil condensates from the Maui Gas Field and the Kapuni Gas Field are shipped out of the port to Marsden Point refinery on the E coast. Port Taranaki is also a fishing port and a base for vessels servicing the gasfield installations.

Coastal vessels may enter, berth, unberth, or depart at any time. Overseas vessels are not berthed during the hours of darkness. The nature of the bottom at the port entrance and in the approach channel is mud and sand; alongside the berths it is mud.

The city of New Plymouth lies about 2 miles E of the port.

Port Taranaki (Westgate)

<http://www.westgate.co.nz>

Winds—Weather.—During the summer season, November to February, regular land and sea breezes prevail; the latter from the SW. In the winter season the weather is variable, with frequent SE winds and clear weather. Gales are reported to be strongest during autumn and spring; these are from points W. Mount Egmont is usually clearly visible when winds are from this quarter.

In the roadstead lying N and NW of the main breakwater, strong winds may be experienced between SW to N to ENE. A heavy swell is reported to precede the arrival of this wind.

Tides—Currents.—The flood current sets W and the ebb E; both attain rates of about 1 knot and are much influenced by winds. There are strong wind influenced currents in the offing. A NE current sometimes sets along the shore at 1.5 knots.



Port Taranaki

During January, February, and March with E weather, an inshore current sets SW; in the offing it sets S with a rate of 1 to 1.5 knots.

Depths—Limitations.—Vessels having a maximum draft of 10m, a maximum length of 225m, and a maximum beam of 35m may be accommodated at Port Taranaki. The maximum draft may be exceeded upon consultation with the harbor-master.

There are three main wharves at Port Taranaki; from S to N they are Blyde Terminal, Newton King Tanker Terminal, and Moturoa Wharf. A buoy lies 0.1 mile E of the head of Blyde Wharf, marking the S limit of the deep water in the harbor; vessels should not approach within 30m of the buoy.

Blyde Terminal is an integrated cargo handling facility. Containers as well as general and refrigerated cargo is handled here. The terminal is 420m long on its N side and 80m long on its SE side.

Vessels of up to 225m in length, having a beam of up to 32.3m, and a deep draft of 10m, can be accommodated at Berth No. 1 and Berth No. 2, which are situated on the N side of the terminal. Vessels of up to 78m in length, having a beam of 20m, and a 6.5m draft, can berth at Blyde No. 3, situated on the SE side of the terminal.

At the root of the main breakwater there is a heavy lift berth, 122m in length, with a dredged depth alongside of 7m. The berth is also used by oil field supply vessels and fishing vessels.

Newton King Tanker Terminal offers bulk petroleum facilities, as well as LPG loading equipment.

The terminal pier is 302m long. No. 1 Berth, on the N side, and can accommodate vessels with a maximum length of 212m with a dredged depth alongside of 10m. No. 2 Berth, on the S side, can accommodate vessels with a maximum length of 212m long with a dredged depth alongside of 10m.

Moturoa Wharf, the N wharf, generally handles dry bulk cargo. The urea loader is one of the most noticeable features of the port. Vessels of up to 98m in length, having a 20m beam and a deep draft of 6.0m, can be accommodated at Moturoa Berth No. 1. Vessels of up to 196m in length, having a maxi-

mum beam of 32.3m and a deep draft of 9.8m, can be accommodated at Moturoa Berth No. 2. Vessels of up to 75m in length, having a maximum beam of 20m and a deep draft of 5.5m, can be accommodated at Moturoa Berth No. 3.

Aspect.—The Sugar Loaf Islands are made up of two conspicuous islands; Moturoa is the SE island and Saddleback is the NW island. Both islands are wildlife sanctuaries. Moturoa is a prominent cone-shaped island. Saddleback is, as its name implies, saddle-backed, with a conspicuous cone-shaped summit. Three rocks, the highest being 12.2m high, lie close off the S end of Moturoa, with Lion Rock lying further S. Corinna Rocks, two pinnacles, lie close off the N end of Moturoa.

The approach from sea can be easily identified by the Sugar Loaf Islands, described above, as well by Paritutu, a prominent dome-shaped hill, 152m high, and Mount Egmont, lying some 14.5 miles S of Paritutu.

Upon close approach, a radio mast, from which red obstruction lights are shown, lying about 4.2 miles ENE of the head of the breakwater, is prominent. Additional landmarks include a church spire, a hotel, a chimney, and a radio tower lying 1.7 miles and 1.2 miles ENE, 1.5 miles SE, and 1 mile S, respectively, from the breakwater head. A conspicuous chimney stands 0.2 mile WSW of Mikotahi Light.

The shore fronting the town of New Plymouth is rocky; foul ground projects up to 0.7 mile off-shore in spots, breaking in a moderate to heavy swell. Seaward of the foul ground there is an uneven bottom of sand, stones, and rock ledges.

Shoaling was reported (1990) E and S of the head of the main breakwater.

Pilotage.—Pilotage is compulsory for all vessels over 100m in length or over 100 grt. Vessels requiring a pilot on arrival should send their ETA 24 hours in advance. All messages can be addressed Harbormaster, New Plymouth. At least 2 hours notice must be given before sailing.

Pilots usually board 2 miles N of Mikotahi Light. Pilots disembark from outbound vessels inside the breakwater heads.

Signals.—The port is equipped with both medium frequency SSB and VHF radiotelephone. Instructions for berthing are given by VHF or medium frequency radiotelephone. Vessels must not attempt to enter the port unless instructions are received by radiotelephone or a pilot is on board.

Anchorage.—Taranaki Roads affords anchorage W of the harbor approach leading line; the recommended berth indicated on the chart is 1 mile N of the head of the main breakwater, in a depth of about 24m, sand and mud, good holding ground. Heavy swell may develop in the roadstead.

Quarantine anchorage may be found in the navigable waters enclosed by an arc of a circle, radius 2 miles, centered on **Mikotahi Light** (39°03'S., 174°02'E.), clear of the range line or in such a position as directed by the harbormaster.

Directions.—Vessels approach the port with the range lights in line. The heads of main and lee breakwaters slope outward under water and vessels should not approach within 120m of the breakwaters.

Caution.—Shoaling was reported (1990) E and S of the head of the main breakwater. A significant surge can develop in the port during periods of strong winds preceding storms.

Cape Egmont to Cape Palliser, including Cook Strait

11.15 Cape Egmont (39°17'S., 173°45'E.), a generally featureless projection, lies about 18 miles SW of Port Taranaki; the shore between is low, rocky, with sand or shingle beaches. Urupa Memorial stands about 5.2 miles NE of the cape.

Mount Egmont is not the highest peak in New Zealand, but it is certainly the most prominent, rising to a perfect cone, 2,516m high. This peak presents the same appearance from all bearings. Its summit, an extinct crater, is flat, and above 1,829m, it is always snow-covered. Pouakai, 1,398m high, is a saddle-shaped spur NW of Mount Egmont. Fanthams Peak, 1,961m high, lies about 1 mile S of Mount Egmont.

South Taranaki Bight is formed between the town of **Opunake** (39°27'S., 173°51'E.) and the entrance to the Patea River, about 35 miles SE. The shore of this bight is faced with cliffs about 30m high. A gas production station, with two towers 39m high, stands 1 mile inland, 3.5 miles NNW of Opunake; a conspicuous flare is burnt from one of the towers. Opunake Bay, which fronts the town of Opunake, is only suitable for small vessels with less than 3m draft. A prominent water tower marked by a red light stands at **Hawera** (39°36'S., 174°17'E.).

Caution.—Petroleum exploration rigs, gas production platforms, and floating production, storage and off-loading installations (FPSO) are found SW of Cape Egmont in the Maui Gas Field, where the Maui A and Maui B gas production platforms are in operation. Maui A stands 22 miles SW of Cape Egmont; gas pipelines connect the platform to the shore ENE and from the platform to Maui B, a production platform standing 9 miles SW. A 135,000 ton tanker, the *Whakaaropi*, is permanently moored about 1 mile SW of Maui B and serves as an FPSO. Unauthorized navigation is prohibited within 500m of the platforms and FPSO. These pipelines contain flammable gas and a vessel damaging them would face a certain fire hazard. As charted, anchoring and fishing are prohibited within the vicinity of the pipeline. Additionally, flaring of gas takes place from time to time from Maui A platform. Unlighted buoys and other obstructions may lie near the platforms; construction operations are underway in the vicinity of Maui B. Supply and service vessels may be operating in the vicinity of both platforms. Vessels are recommended to give platforms and the FPSO a berth of at least 2.5 miles.

Patea Banks, with a least depth of 15.2m, lie about 5 miles W of the Patea River Entrance.

North Trap and South Trap, with depths of 6.4m and 7.8m, lie on Whenuakura Spur, about 5 and 6 miles SSE of the entrance to the Patea River. Graham Bank, with a least depth of 11m, lies about 8.5 miles SSW of Patea River Light.

The Rolling Ground, a detached shoal with a least depth of 16.5m, lies 16 miles WSW of Patea Light.

11.16 Patea Harbor (39°47'S., 174°29'E.) (World Port Index No. 55190), which can only be utilized by very small vessels with local knowledge, is no longer used by coastal vessels. The entrance to the Patea River should not be approached at night inside the 10m curve.

The entrance to the Patea River is comprised of scrub and lupin-covered cliffs, about 30m high, from which breakwaters project. Inside the bar, the river is navigable as far as the town

bridge, 1 mile above the entrance. The width between the breakwaters is 67m. An overhead cable crosses the river 0.2 mile within the entrance. The wharves lie on the E bank below the bridge.

A prominent white water tank stands at a height of 60m at the NW end of Patea, and a radio tower on Bluff No. 2, at a height of 353m, stands about 8 miles N of the town.

The bar at the entrance to the Patea River extends only a short distance seaward of the LW mark on the coast. The bar is exposed to the prevailing W winds from which heavy seas are experienced. There is a depth of about 2.7m on the bar at HWN and 4m at HWS. Freshets occur from June to August.

Tides—Currents.—Outside of the bar it is reported that the flood runs for 5 hours; the ebb runs for for 7 hours. Higher tides can be expected with N winds, and the reverse with S winds. Tidal currents set parallel to the coast and the set is considerable during W, S, and SE winds.

Anchorage.—From 1 to 2 miles offshore the bottom is composed of fine sand, with occasional patches of rock. In moderate weather, vessels can anchor, in depths of 11 to 18.3m. An anchor buoy is necessary due to the bottom being foul in spots.

The shore in this vicinity is nondescript. Patea water tank can be seen at a distance of 15 miles. A small water tank near the W end of a group of houses at Beach Camp, 7.5 miles ESE of the Patea River Entrance, is prominent in the afternoon sun.

Caution.—Submarine pipelines may exist up to 7 miles SE of the Patea River Entrance.

Wanganui Harbor (39°57'S., 174°59'E.)

World Port Index No. 55180

11.17 The port of Castlecliff is situated at the mouth of the Wanganui River. The city of Wanganui lies on the N bank of the river, about 4 miles from Castlecliff. The entrance to Castlecliff is between two moles, the outer parts of which project in a SW direction for about 305m and are about 183m apart. A timber training wall, 145m long, in ruins, runs from the South Mole in a W direction, beginning at a position 227m from the mole end. The distance between the end of this wall and the N mole is about 129m. There is a sand bar off the entrance, with depths varying from 1.8 to 3.5m below chart datum. The town channel is closed to shipping.

Local deflection of the magnetic compass is reported to occur in the vicinity of the Waitotara River.

Tides—Currents.—Off the coast adjacent to the harbor, the current sets N with the flood and S with the ebb at a rate of 1 to 2 knots. When approaching the entrance to the port, the current is much influenced by the direction of the wind. It has been found that the current sets to the S during and for a period of time after a W wind has been blowing. Rates from 2 to 3 knots at neaps and 3 to 5 knots at springs have been observed at the entrance and in the channel up to the wharves. All information regarding bar conditions and tides is relayed by radiotelephone or VHF.

Depths—Limitations.—Vessels may enter, berth, unberth, or depart during the hours of darkness. A vessel, 125m in length, drawing 5.2m can berth alongside. The nature of the bottom in the channel is sand, and within the swinging basin, mud. Shoaling has been reported (1993) in the swinging basin

and the basin now includes drying areas and reduced depths alongside. The harbormaster should be contacted for the latest information.

This harbor should not be entered without local knowledge.

Castlecliff Swinging Basin is formed on its N side by wharves, numbered 1 to 3, which afford seven berths, numbered 1 to 7, with an overall length of 579m and depths of 3 to 5.2m alongside. The swinging basin is dredged to a depth of 3m.

The channel, E of Castlecliff Swinging Basin, leading to Wanganui is closed to shipping. Depths over the bar range from 2.7 to 3.5m, sand.

Aspect.—Mount Egmont and Mount Ruapehu, lying 84 miles E of Cape Egmont, which was previously described in paragraph 11.15, are distinctly visible from sea. Taupiri, a sharp double-peaked hill, 16 miles inland, in line with Mount Ruapehu, bearing 038°, leads directly to the entrance. When the mountains cannot be seen, the Seven Hummocks, a conspicuous range of hillocks lying 12.5 miles NNW of the rivers entrance are a good guide.

About 2 miles N of the rivers entrance, the shore changes from cliffs to low sand hills. Landguard, a prominent bluff 37m high, lies on the S side of the river about 1.6 miles ESE of the S entrance point of the Wanganui River.

Durie Hill War Memorial Tower (39°56'S., 175°04'E.), 114m high, lies about 2 miles NE of Landguard, 3 miles E of Castlecliff, and is plainly visible from sea in clear weather. The water tower on Bastia Hill, close N of the War Memorial, is 151.2m high and the most conspicuous object on the skyline from the anchorage.

The white surf club, on the beach 0.6 mile NW of the N entrance point of the Wanganui River, is prominent.

Red obstruction lights are shown from a mast, 53m high, about 0.6 mile SE of Landguard. Red lights are shown from another mast 2.2 miles ENE of Landguard.

Pilotage.—According to the Wanganui Harbor Board Bylaws, there are two types of pilotage in Wanganui; pilotage and special pilotage.

Pilotage is the service whereby vessels are directed by radiotelephone from the harbormaster and is compulsory. Masters should not attempt to enter without first receiving from the harbormaster permission to do so as well as directions regarding prevailing depths, bar conditions, etc.

Special Pilotage involves the actual boarding of a pilot and it is not compulsory except in certain circumstances when required by the harbormaster. However, vessels may request a pilot. A pilot will board about 2 miles SW of the harbor entrance. At least 4 hours notice prior ETA should be given via radio to the harbormaster to obtain services of a pilot. The pilot boat is a red and blue launch, 17m in length, with a high wheel house amidships, equipped with radiotelephone. The launch assists vessels to berth.

Signals.—A signal station, although still visible is not used, lies on the summit of Castlecliff. Vessels can communicate via radiotelephone or VHF with the harbormaster. All information regarding bar conditions, tides, and berthing is communicated via radiotelephone or VHF. The harbormaster may be contacted by phone at (06) 344-7684 or cellphone 0274-425-489 when the VHF is not being monitored.

Anchorage.—Vessels can obtain anchorage outside the bar, in a depth of about 12.8m, 0.8 mile WSW of the river entrance, on the alignment of the anchorage lighted beacons, with the light on North Mole Head in line with the entrance rear leading lighted beacon, bearing 063.5°. Should winds become strong from a S or W direction, it is recommended that masters shift berth further seaward.

Quarantine anchorage in the roadstead may be found, in a depth of 18m, with the signal station flagstaff bearing 061°, or in a position within port limits as directed by the harbormaster according to wind directions.

Directions.—In moderate weather, vessels with local knowledge can approach safely within signaling distance, and then, if necessary to wait for the tide, anchor, in depths of 11 to 16.5m, 1 to 2 miles from the bar.

A vessel upon receiving permission to enter should normally steer with the bar range beacons in line until nearing the end of the North Mole, when course should be changed to pass close off the North Mole. When abeam of the beacon on the North Mole, 0.3 mile ENE of the head of the mole, course should be changed for the wharves. Mariners should pay particular attention to any instructions which may be given by radiotelephone.

11.18 The shore between the mouth of the Wanganui River and the mouth of the Rangitikei River, 23 miles SE, is a sandy beach backed by low drifting sand dunes with patches of marram grass. The Rangitikei River is only used by small local craft.

The Manawatu River lies 11 miles S of the Rangitikei River and is distinguished by the Foxton Beach Surf Club tower and a group of radio masts, showing red lights, situated 0.5 mile N and 5.5 miles NE, respectively, of the river's entrance. About 3 miles E of the rivers entrance, on the N bank, is a prominent group of trees on the W side of the town of Foxton, which has not been used by shipping for years.

Cook Strait

11.19 The description of Cook Strait which follows begins with the E side from **Kapiti Island** (40°51'S., 174°55'E.), SW to Wellington, and then SE to Cape Palliser; this is followed by a descriptive narrative of the W side of Cook Strait, from **Cape Farewell** (40°30'S., 172°41'E.) E by S to Stephens Island (including Tasman Bay), and then SE to the Brothers, and finally S to **Cape Campbell** (41°44'S., 174°16'E.).

For the most part there are only a few off-lying rocks in Cook Strait. The W side affords many secure harbors that are easy to access in NW or SE gales, which are the only violent winds. When passing through the strait, vessels generally keep to the W side where the land is high.

Tides—Currents.—The tidal currents in and around Cook Strait are unreliable, and masters are warned to exercise every precaution when navigating in the vicinity. The currents often run in one direction for 8 to 10 hours, while cases have been reported of them going for 18 hours and more. When the currents have been running in one direction, for 8 to 10 hours, it has been found that the opposite current is much weaker, and in some cases, hardly noticeable. The maximum rates shown on the chart, which are usually attained at springs, are also

liable to be experienced at any other time. In the vicinity of Karori Rock and Cape Terawhiti, a rate of up to 7 knots is frequently experienced, but as a rule it does not last for more than about 1 hour. Small vessels are warned to keep well clear of tide rips, as they may lose steerage way, and may in extreme cases, capsize.

Additionally, vessels are cautioned not to approach the land in thick weather, unless certain of their position. The influence of strong gales on the tidal currents is felt when the disturbance is from 24 to 48 hours away, and the influence of the current caused by the winds may prolong or retard the duration of the tidal currents by from 1 to 3 hours.

Tidal currents in the strait run quite quickly, attaining rates of 5 knots and upwards at springs. When the wind runs against the tidal currents, a troubled sea is raised and with heavy gales the strait may be dangerous even for large vessels. The sea caused under these conditions is not as heavy on the W as on the E side of the strait. Local vessels, when bound through the narrow part of the strait against a S gale, stay as much as possible in mid-channel, and usually navigate during the last quarter of the S current.

High water on the W side of Cook Strait occurs about 5 hours later than on the E side, so that when it is HW on one side it is nearly LW on the other. The tidal currents are occasioned by these differences in level. If in addition, meteorological conditions are such that mean sea level is raised on one side of the strait, then the flow from the other side will be considerably increased in strength and duration, while the flow from the other side is correspondingly reduced or, under extreme conditions, even reversed.

During NW or SE gales, or winds of long duration from other directions, especially the former, the flow in the strait is affected by the drift current raising from them. The duration and rate of the NW flow will be increased, and those of the SE corresponding reduced by SE winds, while NW winds will have reverse effect.

In the center of the narrowest part of the strait, between **Cape Terawhiti** (41°17'S., 174°37'E.) and Perano Head, N current begins 15 minutes before Wellington or 4 hours before HW on the shore in that part of the strait, and runs for 6 hours; the S current then runs for the same period. The rate of both currents is from 1 to 3.5 knots, but during spring tides and gales the current setting with the wind may attain rates up to 5 knots. Heavy tide rips are experienced in this area, where there is an uneven bottom, depths varying from 146 to 366m, sand.

Off the shore between Cape Terawhiti and Sinclair Head, 7 miles SE, currents attain a rate of 5 knots during springs and within 1 mile of the Cape, after strong NW gales, the S current sometimes attains a rate of 6 knots. Tide rips project 2 or 3 miles off this shore. This shore should therefore be given a wide berth to avoid being set onto one of the detached dangers.

At the S entrance to Cook Strait, the N current begins 3 hours before HW on the shore in that part of the strait and runs for 6 hours. The S current runs for the same period.

A cold bottom current, probably from the S or subantarctic, appears to run underneath into the deep submarine canyons of Cook Strait. This current is forced to the surface by meeting the steep slopes near the 183m curve. The forcing of this current to the surface may have some influence on the broken water experienced in Cook Strait as well as modifying tidal

currents. Off **Turakirae Head** (41°25'S., 174°55'E.), there is a strong set WNW which projects for 2 miles to sea.

East of Sinclair Head and inside a line between it and Baring Head, the tidal currents are negligible and usually there is an eddy with the N current setting E along the shore towards the entrance to Wellington Harbor.

There are overfalls 6 and 7 miles SW of Sinclair Head and the heavy rips that occur during springs are dangerous to small craft.

Caution.—Ferries regularly transit Cook Strait between **Wellington Harbor** (41°21'S., 174°50'E.) and the entrance to **Tory Channel** (41°13'S., 174°19'E.).

Fishermens Rock, a pinnacle with a depth of 9.4m, is located about 19 miles SW of Kapiti Island. Fishermens Rock should be given a wide berth by vessels of deep draft. Tide rips project NNE and SSW of the rock.

The Cook Strait Cable Protection Zone (CPZ) protects vital submarine cable links between the North Island and South Island. Anchoring and fishing are prohibited in the CPZ. The area is patrolled to ensure compliance and failure to comply may lead to substantial fines and vessel seizure. Further information on the CPZ can be found on the Transpower New Zealand website under "Publications."

Transpower New Zealand

<http://www.transpower.co.nz>

A magnetic anomaly is reported to exist in the vicinity of the Cook Strait submarine cables.

Cook Strait—East Side

11.20 Kapiti Island (40°52'S., 174°55'E.), wooded and mountainous, and which has an observation tower on the summit at an elevation of 529m, lies about 3.5 miles NW of the entrance to the Waikanae River. Kapiti No. 2, the highest peak on the island, is 255m high. A wildlife sanctuary, the W side of the island, is precipitous; the E side rises more gradually from the beach.

Rauoterangi Channel separates Kapiti Island from the mainland E; it has general depths of 37 to 69m in it. For the most part, the channel is clear of dangers except for the reefs projecting from the islets forming Entry Anchorage. Tarapunga Shoal, with a least depth of 11m, extends between 0.7 and 1.2 miles SSW of Taharirimongo Point, the S tip of Kapiti Island. The channel between the reef and the island has depths of 33 to 64m.

Kurukohatu Point, the NE point of Kapiti Island, is a low, round, flat, shingle point. There is shelter from NW winds for small vessels in Waiorua Bay on the S side of Kurukohatu Point. However, vessels should not lie here with any sign of a SE gale.

Tides—Currents.—In Rauoterangi Channel, both the N and S currents are affected by local weather conditions; a S gale increases the N current, while a strong NW wind increases the S current.

Caution.—In heavy W weather, a steep sea develops 0.5 mile off Taharirimongo Point; it is dangerous to small vessels. Tide rips, formed by the wind against the current, lie about 0.3

mile E of Kurukohatu Point, and these should be avoided by small craft.

11.21 Entry Anchorage (40°53'S., 174°55'E.), available to those vessels with local knowledge, is entered at the SE end of Kapiti Island through an opening formed by three cone-shaped islets with reefs projecting off them. This anchorage is protected from the SW by the islets and reefs, and from the NW by Kapiti Island. The E side of Entry Anchorage is formed by Passage Rocks and Tokomapuna Islet, and surrounding reefs. Passage Rocks, with depths less than 1.8m, marked by kelp, lie halfway between Tokomapuna Islet and Kapiti Island, at the NW end of a spit of foul ground projecting 0.4 mile NW from Tokomapuna Islet. The channel between Passage Rocks and Kapiti Island has a least depth of about 6.7m. Tokomapuna Islet, 11m high, lies about 0.4 mile SE of Passage Rocks and a reef of above-water and sunken rocks projects 0.6 mile S from it. The W side of Entry Anchorage is formed by Motungarara Islet and Tahoramaurea Islet, which are bordered by reefs. A monument stands on the N end of Motungarara Islet, the N of the two islets. Between Motungarara Islet and Kapiti Island is a channel with a depth of 4.3m in it.

Anchorage.—Vessels approaching Entry Anchorage, with local knowledge, pass between the end of the reefs projecting S of Tokomapuna Islet and Tahoramaurea Islet. The depths at Entry Anchorage range from 22 to 31m, sand and broken shells.

11.22 The Waikanae River (40°52'S., 175°00'E.) is located on the mainland cross-channel from Kapiti Island. The towns of Waikanae Beach, Paraparaumu Beach, with Raumati S of it, stand 1.5 miles NE, 1.5 miles SW, respectively, of the rivers entrance. An aircraft light is occasionally shown from an airfield between Paraparaumu Beach and Raumati. A prominent white statue, 73m high, occasionally floodlit, stands 1 mile SSE of the airfield.

Hunter Bank (40°58'S., 174°49'E.), with a depth of 16.8m, rock, lies about 5.5 miles SW by S of the S end of Kapiti Island.

The shore between Wairaka Point and Te Rewarewa Point, the N entrance to Porirua Harbor, is high and cliffy. A reef with a rock that dries, projects about 0.3 mile W of Te Rewarewa Point. A reef projects 0.4 mile N from Wairaka Point.

11.23 Porirua Harbor (41°05'S., 174°50'E.) is entered between Te Rewarewa Point and the N end of an isthmus, 1.5 miles SE. The entrance to the harbor is obstructed by a bar with a depth of 1.5m. Small vessels with local knowledge drawing 2.4m can cross the bar at 0.7 flood, in all but heavy W weather.

In good weather, with offshore winds, vessels with local knowledge can obtain temporary anchorage in the bay close within Te Rewarewa Point, but they should proceed to sea when the wind shifts NW, and find anchorage further S, either under Mana Island or in Cook Strait.

Aspect.—Mana Island fronts the harbor; its NW end is flat-topped and covered with pasture land. The N and W sides are steep with rocks offshore; the E side is sloping. A concrete jetty lies 0.2 mile SW of Single Point, which projects midway along the E shore of Mana Island, kelp lies off Shingle Point. South Point, the SW end of Mana Island, is fronted by a

shingle beach. A 8.8m patch lies about 0.4 mile SSW of South Point.

The Bridge, a rocky bar with depths of 4 to 8.8m, connects the SE part of Mana Island to the mainland. There is generally a heavy tide rip on it, and currents attain rates to 3 knots.

A conspicuous radio mast, showing red lights, stands about 0.3 mile S of the N end of the peninsula forming the S side of the entrance to Porirua Harbor. Mount Cooper, 105m high, stands about 0.6 mile SW of the N end of the peninsula. Another conspicuous radio mast, showing red lights, stands about 0.2 mile E of Mount Cooper.

A rock, about 0.9m high, stands on the NW end of foul ground about 0.4 mile N of the N end of the peninsula. Another rock, 0.8m high, stands close E. These dangers are marked by the red sector of the light on **Goat Point** (41°05'S., 174°52'E.), about 1.7 miles SE of Te Rewarewa Point. A conspicuous reservoir stands on Walker Hill, 96.6m high, about 0.2 mile E of Goat Point. Another conspicuous reservoir stands 1.2 miles further S.

Within the bar there are depths of 1.8 to 11.2m off the town of Mana, on the E shore, where the harbor divides; Porirua Harbor projects SSW for about 1.7 miles at the head of which is the town of Porirua East.

Anchorage.—Vessels with local knowledge can obtain anchorage, sheltered from NW winds, 0.3 mile off the S side of Mana Island, W of The Bridge, close E of the 8.8m patch off South Point, in a depth of about 18.3m, coarse sand. Vessels have ridden out strong NW gales here. Additional anchorage may be found NE of The Bridge, in depths of 9.1 to 14.6m, in the entrance to Titahi Bay.

Anchoring and mooring areas, which are allocated by the harbormaster, lie on both sides of the fairway leading E towards Paremata Road.

Directions.—This port should not be entered without extensive local knowledge. The entrance range, consisting of Goat Point Light, a beacon close E, and the conspicuous reservoir on Walker Hill, all in line bearing 100°, lead through the entrance channel that lies between the N end of the peninsula on the S side and the 1.5 and 1.8m shoals. At night, vessels should approach the harbor steering in the white sector of Goat Point Light. This course should be held until roughly 0.2 mile W of Goat Point, when leading beacons at Paremata come into range bearing 171.2°, when course should be changed S to head for them. At night, vessels should keep in the narrow white sector of Paremata Light, which leads to the junction of Porirua Harbor and Golden Gate.

11.24 Ohau Point (41°14'S., 174°39'E.) lies about 11 miles SSW of Mana Island; the shore between consists of cliffs fronted by scattered rocks. An 18.3m shoal lies 1.5 miles NE of Ohau Point and there is a 4.2m shoal 0.6 mile W of the first shoal. A dangerous rock lies 0.5 mile ENE and a rock, with a depth of less than 1.8m, lies about 0.7 mile W, respectively, of Ohau Point.

Cape Terawhiti (41°17'S., 174°37'E.) is a conspicuous bold promontory that rises steeply from the sea to a height of 458m in an almost semi-circular hill, about 1.2 miles NNE of the S end of the cape. From N and S the cape's outline is convex and well-marked. Southeast of Cape Terawhiti to Sinclair Head, the shore is mostly bold and cliffy. Several peaks are located along this section of shore including Outlook Hill, 534m high, which

has a radar tower 14m high on the summit, lying about 2 miles SE of Cape Terawhiti; Te Kopahou, 484m high; and Hawkins Hill, with a radar scanner standing at an elevation of 495m about 0.2 mile SW of it, about 1.2 miles N and 2.2 miles NNE, respectively, of Sinclair Head.

Caution.—Abnormal variation may be experienced in shallow water in close proximity to the submarine power cables laid across Cook Strait between Cape Terawhiti and Fighting Bay, on South Island. As charted, anchoring and fishing are prohibited in the vicinity of these cables.

Luna Rock is steep-to with a depth of less than 1.8m, and it lies about 1 mile NW of **Karori Rock** (41°21'S., 174°39'E.). To pass SW of Luna Rock a vessel should keep the tower on Karori Rock bearing not more than 110°. Thoms Rock, which dries, lies about 1 mile SE of Karori Rock. The ground is foul between Thoms Rock and the shore NE. A rock, with a depth of 7.3m, lies 0.4 mile SW of Thoms Rock and 1.5 miles off the coast. There are tide rips in the vicinity of this rock, especially during the NW current.

Cape Terawhiti, well open W of Karori Rock, bearing about 335°, leads SW, and Pencarrow Light, about 6 miles E of Sinclair Head, well open S of that head, bearing about 086°, leads S of Thoms Rock and the 7.3m rock.

Wellington Harbor (41°21'S., 174°50'E.)

World Port Index No. 55150

11.25 Wellington Harbor, previously known as Port Nicholson, is land-locked, with depths varying from 11.3 to 22m. The main entrance, which leads into the harbor, is clear of known dangers and has no bar. All vessels may enter or leave during the hours of darkness; berthing is carried out at any state of the tide.

The main entrance to Wellington Harbor lies between Barrett Reef and the shore E. South winds occasionally send a heavy sea and swell into this passage which, in gales, sometimes breaks right across.

A reef, on the center of which lies Steeple Rock, 9.1m high and prominent, projects about 0.4 mile N of Dorset Point. A wreck, with a depth of 8.2m, stands about 0.5 mile NW of Steeple Rock Light.

CentrePort, New Zealand

<http://www.centreport.co.nz/centreport/>

Tides—Currents

Outside of the harbor entrance, on the range line, from abeam Baring Head till abeam Pencarrow Head, a W set on both the flood and ebb will frequently be experienced, which may set a vessel to the W of the entrance, or on the wrong side of a vessel leaving the harbor which may be blocking the range on the way out of the harbor. In the narrows at the entrance the rate of the tidal currents rarely exceeds 0.7 knot, and within the port it is less. After heavy rain a considerable freshet sets out of the Hutt River, in the NE part of the harbor. The level of the water is influenced by winds, strong S winds raising and N winds lowering it.

Depths—Limitations

As stated above, the maximum draft permissible under conditions of moderate sea swell is 9.7m plus the height of the tide. The maximum draft permitted alongside any wharf is 11.0m, except for berthing at certain wharfs; there is no limit on length.

The Main Port is situated on the W side of Wellington Harbor and is comprised, from N to S, of the Tranz Rail Inter-Island Terminal, Aotea Quay, Container Terminal Wharf, Kings Wharf, Glasgow Wharf, Inter-Island Wharf, Topcat Berth, Queens Wharf, and Taranaki Street Terminal.

Aotea Quay Wharf is comprised of six numbered berths. General cargo is worked here. The berths average 183m in length and have no length restrictions. Berth No. 1 to Berth No. 6 can accommodate tankers from 5.1 to 9.1m draft.

The Centreport Container Terminal, lying S of Aotea Quay breastwork, affords two container berths each 293m long and can accommodate vessels with no length restrictions and maximum drafts from 10.7 to 11.0m.

Lambton Harbor, which fronts the city of Wellington, has general depths of 11 to 18.3m. The harbor lies just S of the container terminal.

Kings Wharf has a length of 251m and a depth of 9.4m alongside. It houses one of the largest cold storage areas on North Island.

Glasgow Wharf has three berths. Berth No. 1 has a length of 84m and a depth of 4.7m alongside. Berth No. 2 has a length of 218m and a depth of 9.3m alongside. Berth No. 3 has a length of 240m and a depth of 9.3m alongside. Ro-ro vessels are worked at Glasgow Wharf.

The Inter-Island Wharf has two berths. Berth No. 2 is 150m in length and has a depth 7.8m of alongside. The berth is dedicated to ro-ro service. Berth No. 3 has a length of 213m and a depth of 9.3m alongside.

Waterloo Quay is used for a high speed ferry that carries both passengers and cars. The quay has a length of 99m and has a depth of 7.0m alongside.

The Queens Wharf can handle vessels 200m in length and 7.4m draft. An area of reclaimed land fronts Custom House Quay N of the inner T-head of Queens Wharf.

The Taranaki Street Terminal, for ro-ro vessels, can accommodate vessels with a maximum length of 152m and a maximum draft of 7.4m. At the S end of the wharf, there is a 35 ton ro-ro link span. Taranaki Street Breastwork Quay, extending E from the root of the wharf, is 233m in length and can accommodate a ship of 220m in length, drawing 7.5m. Between Taranaki Street Wharf and Queens Wharf is an area of reclaimed land.

The Overseas Passenger Terminal (OPT) lies about 0.8 mile WSW of Jerningham Point. A boat harbor stands E of the wharf. The OPT Berth No. 3 has a length of 259m and a depth of 9.2m alongside.

Evans Bay is entered between Halswell Point and Jerningham Point, 1 mile West. North gales send a choppy sea into the bay. Halswell Point, the N tip of the peninsula forming the W side of Wellington Harbor, is distinguished by a prominent white monument lying close within it.

The Burnham Oil Facility, situated at the S end of Evans Bay, about 0.5 mile from its head, is comprised of three berth-

ing areas. These areas are the Burnham Wharf, Miramar Wharf and the Incinerator Jetty.

Burnham Wharf, situated near Wellington International Airport, has a total length of 257m and can accommodate tankers with unlimited lengths and a maximum draft of 8.2m.

Miramar Wharf offers two berths. The W wharf, 170m in length, will accommodate tank vessels of unlimited length and drafts of 8.7m. The E face handles vessels with a maximum length of 150m and a maximum draft of 5.0m.

Point Howard Wharf, 163m long, is joined to Point Howard, the N entrance to Lowry Bay. The wharf is used for recreation; the wharf is exposed and can only be used in good weather.

The Seaview Wharf, with a T-head 250m long, extends 0.3 mile SSW from Point Howard. There is a depth of 11.1m alongside the W side of the T-Head. Petroleum products are worked at the Seaview Wharf.

The Hutt River discharges into the NE portion of Wellington Harbor. The towns of Hutt and Petone lie on its E and W sides, respectively. There is a wharf at Petone, about 1.5 miles WNW of the Hutt River entrance.

Aspect

West side of Wellington Harbor.—Owhiro Bay (41°20'S., 174°46'E.) lies about 2 miles ENE of Sinclair Head, and sunken rocks and rocks that dry project 0.2 mile S from its W entrance point. There is a sandy beach at the head of the bay. Taputeranga Islet, fringed with rock, lies in the entrance to Island Bay, 0.7 mile E of Owhiro Bay. There is a jetty on the W side of the head of Island Bay.

Lyall Bay, which is unfit as an anchorage because of reefs projecting off its entrance point and the abandoned submarine cables which exist in the bay, and of its being open to S gales, lies about 1.2 miles E of Taputeranga Island. Luhrs Rock, awash, lies 0.3 mile SSE of the W entrance of Lyall Bay, and reefs and a rock lie between. The sea breaks on Luhrs Rock in moderate weather, and also on some of the patches on the W side of Lyall Bay.

Palmer Head (41°20'S., 174°49'E.) forms the W entrance point of Wellington Harbor. West Ledge is a reef comprised of large boulders, some of which are above water, that project about 0.5 mile SSW of Palmer Head. The W side of Wellington Harbor is formed by a moderately high peninsula of which Palmer Head is the S tip. A conspicuous monument, which consists of a white, cylindrical tower, 8m high, stands close N of Palmer Head. Beacon Hill is the highest point of the S part and Mount Crawford, 2 miles N, is the highest point of the N part. A prominent prison building stands on Mount Crawford. The peninsula appears as an island from sea.

Dorset Point lies about 1 mile NE of Palmer Head, and a rocky reef extends SE from it. Barrett Reef, mostly steep-to, is comprised chiefly of above-water rocks, and lies about 0.7 mile E of Palmer Head. Outer Rock, 3.4 high, lies near the S end of Barrett Reef. A rock, with a depth of 4.3m, lies near the N end of Barrett Rock. A depth of 9.1m lies about 0.2 mile E of the rock. A heavy sea rolls over Barrett Reef in S weather. A depth of 4.7m lies at the N tip of Barrett Reef.

Chaffers Passage, which leads W and N of Barrett Reef, has a least depth of about 9.8m in the fairway. A wreck, with a

depth of 9.8m, lies in Chaffers Passage, about 0.7 mile ENE of Palmer Head.

Worser Bay is entered between a point lying about 0.5 mile N of Dorset Point and a point 1 mile further NNW. This bay affords excellent anchorage with good holding ground of stiff mud, however, a swell sets into the bay. There is a small wharf, with a depth alongside of 4.9m, in the SW corner of the bay called Seatoun Wharf. Falcon Shoals, with a least depth of 7.9m, lie 1 mile N of Steeple Rock. A lighted buoy marks their NE extremity.

East side of Wellington Harbor.—Turakirae Head (41°26'S., 174°55'E.) is a bold promontory that forms the W entrance point of Palliser Bay. The Rimutaka Mountains project NE from the head. When seen from quite a distance E, Turakirae Head looks to end in a bold, abrupt convexity, however, on close approach a low sandy point projects from its base.

Palliser Bay is entered between Turakirae Head and **Te Hamenga** (41°32'S., 175°11'E.), about 13.5 miles ESE. Due to poor holding ground and S exposure, this bay is unsuitable for shelter. From Te Hamenga the shore projects about 6.5 miles SE to Cape Palliser, which is described in paragraph 10.84.

Baring Head lies 3 miles NW of Turakirae Head and is a flat table point, 166m high. Drying rocks and above-water rocks extend up to 0.5 mile offshore off this part of coast necessitating giving Baring Head a wide berth. Arabella Rock, a steep-to pinnacle with depths of 4.4m, on which the sea breaks, lies near the N end of a rocky ledge, about 0.6 mile NW of Baring Head.

Baring Head, bearing less than 102°, leads S, and Pencarrow Head, bearing more than 000°, leads W of Arabella Rock. At night, Pencarrow Light leads W of Arabella Rock.

An 8m shoal lies about 0.3 mile SW of Pencarrow Head.

Pencarrow Head represents the E entrance point of Wellington Harbor, and submerged and drying rocks project 0.2 mile from it. This E side of the entrance is mostly high and lacking any notable features. Rocks project about 0.1 mile off the points and a boulder reef fronts the shore about 3.5 miles to Point Arthur. From this point the shoreline changes to a sandy beach backed by low sandhills around Robinson Bay.

Ward Island, 28m high and yellow, lies near the N edge of a bank extending NW from Point Arthur. Hope Shoal lies on the W edge of this bank.

Somes Island lies with its S end about 2 miles N of Hope Shoal Light. Mokopuna Island, a wildlife sanctuary, lies on a reef N of Somes Island. There is a pier on the SE side of the island.

Pilotage

Pilotage in Wellington harbor is compulsory N of Point Gordon for all vessels exceeding 200 grt. The pilot vessel is not usually on station outside the entrance, and all vessels requiring a pilot are required to give 24 hours notice by radio of expected ETA; confirming or amending 4 hours before arrival. All communications should be addressed to Harbormaster, Wellington.

Should it not be possible to give prior notice of ETA, it may be up to 1.5 hours after a vessel is sighted by the signal station on Beacon Hill before a pilot can board the vessel.

Pilots are transferred by either launch or helicopter which transfers pilots by winching. A 1 hour confirmation to Wellington Harbor Radio is required to establish whether a helicopter or pilot vessel will be used. Pilots usually board about 2.5 miles SW of Pencarrow Head, but in the event of heavy S weather, it may be necessary to board or disembark the pilot in smooth water. The pilot boat is equipped with radiotelephone. Vessels are notified of their berths by the outer signal station.

Regulations

The quarantine anchorage is situated on the E side of Somes Island. The vessel will be boarded within the charted area off Lambton Harbor.

Signals

Wellington Harbor Control may be contacted on VHF channel 14 or 16. Vessels are also required to maintain a listening watch on channels 14 and 16 if practicable, while within the waters of the port.

The outer signal station is situated on Beacon Hill on the W side of Main Entrance, about 1 mile NNE of Palmer Point. A continuous visual watch is maintained and vessels can communicate via the International Code of Signals by blinker light or radiotelephone.

If a vessel is sighted standing into danger by Beacon Hill or Pipitea Wharf signal station, and whose attention cannot be attracted by radiotelephone or morse flash "U", then a danger signal will be fired. This signal flare will rise to about 122m, its course being marked by a smoke flare trail. At the zenith of its flight, a loud explosion and a brilliant flash will occur. Prior to and following the firing of the signal, the morse letter "U" will be flashed at the vessel and sustained until action is taken.

Anchorage

Good anchorage may be found in the harbor sheltered from the prevailing winds from the NNW and SSE; the bottom being blue clay, silt, sand, and shells.

The inner, outer, quarantine, and explosives anchorage grounds are all best shown on the chart.

New Zealand authorities advise that when anchoring, especially in a light condition, to drop two anchors in an E and W direction, veering from 75 to 90 shots of cable, as it frequently blows hard with heavy gusts of wind off the high land that surrounds the harbor, causing a vessel to sheer about. In very strong winds a vessel will lie much easier by having both anchors down.

Anchorage is prohibited within 150m of the jetty lying on the NE side of Somes Island.

Directions

With Pencarrow Head Light bearing 022°, and about 1.7 miles distant, bring the main entrance range lights into alignment. Continue on this range, or slightly to the E of it if there is outbound traffic, until Steeple Rock Light is abeam to port. Then steer 005° with Somes Island Light on the starboard

bow until Point Jerningham opens clear of Point Halswell. When in this position, steer 310° until Point Halswell is abeam, then change course for the wharves or anchorages.

Masters are warned that they must keep on their starboard hand of the channel, inbound and outbound. Vessels entering the harbor should give Point Halswell a wide berth to allow vessels leaving Lambton Harbor sufficient sea room. All vessels may enter or depart during the hours of darkness.

Cook Strait—West Side

11.26 Cape Farewell (40°30'S., 172°41'E.) is the N extremity of South Island and appears on SW bearings as an isolated cliff, which ends in steps W. The land behind the cape rises to a brush-covered summit, 318m high, about 2.7 miles SSW. The Archway Islands is comprised of four islets, the highest being 63m high. These islands front Wharariki Beach close SW of the cape.

Farewell Spit, which projects about 20 miles ESE from Cape Farewell and is marked by a light, is steep-to on its S side and a large part of its E end is covered at HW. The section of the spit that is always above water extends roughly 15 miles from Cape Farewell and is comprised of drifting sand dunes with patches of manuka scrub, marram grass, interspersed with many fresh water lagoons. The S side of Farewell Spit is comprised of Steep-to Shoal, which dries 1.8m.

Caution.—Shoaling has been reported up to 6 miles SE of the light on Farewell Spit.

Golden Bay is entered between Bush End Point, at the E end of Farewell Point, and Separation Point, 14 miles S. The W and S sides of the bay are backed by high land covered with bush. General depths of 18.3 to 36.6m exist in Golden Bay, and it affords shelter during winds in the W semi-circle over its whole expanse.

Golden Bay

11.27 Northwest shore.—Tasman Corner, lying about 4 miles S of Abel Head, affords good anchorage, in depths of 12.8 to 14.6m, sheltered from E winds by Steep-to Shoal. The islet of Able Head, 43.3m high, is joined to the shore by a drying sand bank, and lies on the S side of the inner end of Farewell Spit.

Vessels with local knowledge can obtain anchorage, in depths of 9.1 to 14.6m, mud, good holding ground, off the mouth of the Aorere River, which enters the SW corner of Ruataniwha Inlet.

Mount Burnett, 637m high, with a double rounded peak, is the most prominent mountain on the W side of the bay.

11.28 Southeast side.—Separation Point is a small, cliffy promontory joined by a neck to the high land rising close behind it.

Wainui Inlet is entered about 3 miles W of Separation Point; there is a sandy beach at its head and dries a short distance inside the heads. The Tata Islands lie close W of the W entrance point of the inlet. Small vessels with local knowledge can obtain confined anchorage under the lee of the of the S island.

Abel Tasman Memorial stands about 1.5 miles SW of the W entrance point of Wainui Islet.

Tarakohe Harbor (40°51'S., 172°54'E.) is located 1.5 miles SSW of Abel Tasman Point.

The harbor is formed between two breakwaters which extend about 0.3 mile NW from the coast. Moles extend from the middle of the inner sides of both breakwaters, dividing the harbor into outer and inner parts. A wharf is situated in the NE corner of the inner part. At the root of the wharf is Golden Bay Cement Company's works, with a chimney.

Vessels bound for Tarakone direct from overseas ports should give as much notice as possible of their arrival to enable port officials to be made available from Nelson.

Permission to berth in Tarakohe should be requested of the harbormaster at least 12 hours in advance of arrival. Vessels berth bows out, whenever practicable, a harbor service craft equipped with radiotelephone is available to assist.

Depths—Limitations.—The wharf is 120m in length. Two bulk cement loading towers stand on the wharf. The harbormaster's office is in the base of the outer tower. There is a minimum charted depth of 4.3m in the approach to the wharf.

The Motupipi River empties out into Golden Bay midway between the town of Tarakohe, lying about 0.5 mile SW of the wharf, and the entrance to the Takaka River, about 3.5 miles W. Vessels with local knowledge can obtain good anchorage, during S and E winds off the mouth of the Motupipi River, in a depth of 7.3m, about 1.5 miles offshore. The sands dry almost 1 mile from the river's mouth.

The Takaka River empties into the bay through a delta of low scrub and rush-covered islands. The E entrance point is bush-covered. Rangihaieta Head, the NW entrance point, is of limestone formation, 50.3m high, and bare on the W side. A radio mast, 16.2m high, stands about 1 mile S of Rangihaieta Head.

Vessels with local knowledge can obtain anchorage off the mouth of the river, in depths of 7.3 to 12.8m, with the outer beacons in range.

The entrance of the Onekaka River lies about 5 miles NW of Rangihaieta Head.

Parapara Inlet is entered about 2.2 miles NNW of the entrance of the Onekaka River. The S entrance is a low, narrow isthmus. The inlet can only be used by small vessels with local knowledge. There is good anchorage, in depths of 9.1 to 14.6m, off the entrance to Parapara Inlet.

Pilotage.—Pilotage is not compulsory. A 12 hour notice is required for a pilot; at least 7 days notice is required for large vessels. The pilot boards 2 miles from the harbor on the entrance leading line.

Directions.—A vessel should bring the main range lights in line bearing 139° and steer on that line between the breakwater until the wharf approach range lights are in line bearing 123.5°, which alignment leads to the wharf.

Tasman Bay

11.29 Tasman Bay is entered between Separation Point and the NW end of D'Urville Island, 40 miles E. The land at the head of the bay is low with some conspicuous white cliffs. However, both sides of the bay are mountainous.

Tides—Currents.—The tidal currents along the shores of Tasman Bay attain rates of 0.2 knot to 1 knot. A S current of almost 1 knot generally prevails during strong N winds.

Tasman Bay—West Side

11.30 Awaroa Bay is a shallow indentation that is entered between a point about 2.5 miles SSE of Separation Point and a point about 2.5 miles further SSE. A 4.3m rocky patch lies in the center of the bay, about 1 mile SSE of the N entrance point. The bay affords anchorage, in a depth of 18.3m, in moderate weather with offshore winds.

The shore between Awaroa Head, the S entrance point of Awaroa Bay, and Abel Head, about 0.7 miles ESE and then for 1.7 miles S to Reef Point, is rocky, steep, and bush-covered. Abel Head is notable for a white patch on its NE side.

Tonga Roadstead lies between Reef Point and Foul Point, about 1.2 miles S. In the NW corner of the roadstead is a sandy beach. Tonga Island, 76.8m high, steep and rock-fringed, lies about 0.5 mile SE of Reef Point. Whale Rock, awash, marked by a beacon, lies 0.5 mile SE of Foul Point.

Anchorage, in a depth of 13m, may be obtained during offshore winds, about 0.4 mile W of Tonga Island.

Several rocks lie about 0.5 mile offshore between Foul Point and North Head, about 2 miles S. Bark Bay Reef (Big Reef), which dries at 1.2m, lies about 0.7 mile SSE of Foul Point, with Pinnacle Islet about 0.7 mile SSW of the reef. A rock, awash, stands close NE of Pinnacle Islet. Due to the many dangers lying off this section of coast, vessels should not approach within 2 miles of it.

Torrent Bay is entered between North Head and Pitt Head, 0.6 mile SSE. An islet lies close NE of Pitt Head. Vessels with local knowledge can obtain good anchorage in the outer part of Torrent Bay, in depths of 11 to 12.8m, during offshore winds. The S part of Torrent Bay affords good shelter for small vessels, in depths of 5.5 to 6.4m, except during NE winds.

11.31 Astrolabe Roadstead affords snug anchorage with offshore winds and lies between Adele Island and the shore W.

Hapuka Reef, which dries 1.2m and is comprised of several pinnacles, lies about 0.5 mile E of Te Karitu Point. A narrow channel, with a depth of 11m, lies between the reef and the mainland.

Fisherman Island, 40.8m high and rocky, lies about 0.4 mile S of the SW end of Adele Island. A rock, awash, lies close SE of Fisherman Island.

Anchorage.—Vessels with local knowledge can obtain anchorage, in a depth of 11m, about 0.4 mile SW of Te Karitu Point. Within the N approach to Astrolabe Roadstead, between Hapuka Reef and Six Foot Rock, there is a depth of 14.6m. The narrow channel between Six Foot Rock and Jules Point, 0.2 mile SSW, has a similar depth.

The S approach to Astrolabe Roadstead, between the S tip of Adele Island and Fisherman Island, has a least depth of about 4.3m. This passage is narrowed by a sandspit, that dries, extending from the W side of Adele Islet. Small vessels with local knowledge can obtain sheltered anchorage off the NW shore of Adele Island.

The Motueka River empties out into the bay through a delta about 6.2 miles SSW of Adele Islet, and it is not navigable.

Caution.—The entrance to the Motueka River has been mistaken several times for the entrance to Port Motueka and mariners should exercise caution.

11.32 Port Motueka (41°08'S., 173°01'E.), which should only be used by vessels with local knowledge, is a fishing port entered through a channel between the N end of Jacketts Island and the mainland N. A training wall projects 0.3 mile ENE from the N end of Jacketts Island. In 1983, the wall was in poor condition. A sand bar, that dries, which is subject to change, lies parallel with and off the entrance to the port. A wharf lies on the N shore, close within the entrance of Port Motueka.

Moutere Bluff (41°13.5'S., 173°05'E.), about 64m high, lies about 5 miles SSE of the entrance to Port Motueka and is notable for prominent white cliffs.

Mapua Harbor, entered about 2.5 miles SSE of Moutere Bluff, can only be used by small vessels with local knowledge.

Tasman Bay—East Side

11.33 Nile Head (40°44'S., 173°52'E.) represents the NW tip of D'Urville Island, whose W side comprises the E side of Tasman Bay.

Two Bay Point lies about 6 miles SSW of Nile Head and the shore between is rocky and steep.

Greville Harbor, entered between Two Bay Point and Ragged Point, does not provide protection from NW gales to large vessels. Araiawa Rock, 21.3m high, lies about 0.2 mile NW of Ragged Point. A rock, with a depth of 0.6m, lies about 0.2 mile ENE of Araiawa Rock. Within Greville Harbor there are depths of 11 to 18.3m. The ESE arm of the harbor, which is almost closed by boulder spits on either side of the entrance, has general depths of 12.8 to 27.4m. The boulder spit on the N side of the entrance to this arm is marked by a beacon. An overhead power cable, with a vertical clearance of 37.5m, spans the harbor near the boulder spits.

The shore between Ragged Point and Okarewa, about 4 miles S, is precipitous. Rahonui, an islet 19.2m high, lies about 0.7 mile NNW of Okarewa Point. Hapuka Islet lies close S of Okarewa.

Manawakupakupa Bay, which is unsurveyed, is entered between Hapuka Islet and the northernmost of Paddock Rocks, which lie on a spit of foul ground extending 1.2 miles NNW from a position about 1 mile N of **Sauvage Point** (40°57'S., 173°46'E.).

Current Basin lies between the S end of D'Urville Island and Okuri Point, 1 mile S on the mainland. The entrance is obstructed by several rocks and dangers including Hope Rock and the Beef Barrels, which are all best shown on the appropriate chart.

The channel through Current Basin is available to vessels with local knowledge only.

11.34 French Pass (Te Aumiti) (40°55'S., 173°50'E.) joins Current Basin with Admiralty Bay and local knowledge is essential for its use.

An overhead power cable, with a vertical clearance of 80m, spans the channel from Reef Point to Channel Point.

A reef, that dries, projects about 0.2 mile S from **Reef Point** (40°55'S., 173°50'E.), and Fisherman Pass, a narrow boat

channel, leads through the reef close S of the Point. A channel, 100m wide, leads between the S end of the above reef and Channel Point on the mainland. There are general depths of 18.3 to 27.4m in French Pass, and apparently depths of at least 11m in the fairway into Admiralty Bay.

Middle Bank, with a least depth of 2.7m, broken white shells, lies 0.3 mile SW of Channel Point. A bank, with a least depth 3.7m, stones, lies about 0.3 mile ENE of Reef Point. There is a least depth of 11m between the bank and Collinet Point, and a similar depth in the channel between it and Reef Point.

Masters of vessels are cautioned against taking a vessel through the pass against the current, as not only does a vessel sometimes not answer its helm, owing to the eddies acting on her bow, but there is danger of meeting a vessel coming from the opposite direction, which is not visible in sufficient time to prevent collision. Powered vessels of moderate size can, with prudence, pass through at slack water or with the tidal current and so save some 15 miles of distance and avoid the heavy cross sea that is frequently met N of D'Urville Island and Stephens Island. Local knowledge is highly desirable.

These currents attain rates of from 5 to 7 knots and do not set directly through the narrow channel, but rather across, with the flood current setting in a SW direction as far as the narrows and then along the shore between Channe Pointl and Rock Cod Point. The ebb current sets in the opposite direction. Slack water lasts about 20 minutes. The extraordinary irregularity of the bottom, together with the narrowness of the channel, accounts for the many eddies.

Care must be taken to prevent a vessel being swung round onto Collinet Point by the eddies.

Caution.—All vessels intending to transit French Pass are to give warning 10 minutes before reaching the narrows on VHF channels 16 and 65.

11.35 The shore between Okuri Point and Kakaho, about 5.5 miles SW, is rocky and precipitous. The summits of the peaks in this vicinity are scrub-covered.

Croisilles Harbor (41°03'S., 173°37'E.) is entered between Kakaho and Cape Soucis, 3.5 miles WSW. Croisilles Harbor is relatively easy to enter and offers good shelter in all weathers. Additionally, it is the best harbor of refuge on the E side of Tasman Bay for large vessels in NW gales.

Caution.—Motuanauru Islet, 112m high, lies close within the W limit of foul ground projecting nearly 2 miles W and 1.5 miles SW of Kakaho. Otuhaereroa Islet, 99m high, lies midway between it and Kakaho. The SW limit of the foul ground is marked by Moukirikiri Islet, 28.6m high and conical. All of the above islets are brush-covered. The above foul grounds W end should be given a berth of about 0.7 mile.

Squally Cove lies at the head of Croisilles Harbor and affords excellent anchorage for vessels with local knowledge in bad NW weather, in a depth of 12.8m.

The shore SW from Cape Soucis, about 9.5 miles to Pepin Island, has no known off-lying dangers. Stuart Hill rises to 400m in the central part of Pepin Island; the island is steep, rocky, and conspicuous.

The W portion of Delaware Bay is formed by the E coast of Pepin Island. Ataata point is the W entrance point of Delaware

Bay and the shore, about 2.5 miles SW to Glenduan, is rocky and steep. Two prominent land slips, which are light-colored, lie about 2 miles SW of Pepin Island.

Nelson Harbor (41°16'S., 173°17'E.)

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11.36 Port Nelson lies in the SE part of Tasman Bay. The harbor is formed on the NE by Boulder Bank, a narrow bank which almost covers at HW, and by Haulashore Island on the SW.

Port Nelson

<http://portnelson.com>

Tides—Currents

In the entrance channel approaches to berths and alongside wharves, the tidal rate at neaps is 3 to 4 knots and 5 to 6 knots at springs. The neap range was 1.8m and the spring range was 3.4m.

In 1976, it was reported that in Main Channel and at Main Wharf, the current attained a rate of 4 knots at springs; no current was experienced for a 30 minute period, 15 minutes either side of HW and LW. At McGlashen Quay and in the basin, the current experienced was less than 1 knot.

The incoming current sets onto the W end of McKellar Quay; the outgoing current sets off the quay and also sets onto the N end of Brunt Quay and the whole of Main Wharf.

Depths—Limitations

The main entrance had a controlling depth of 8.2m in 2003. The dredged approach and entry channel has a maintained depth of 7.9m. Inner Channel and approaches to berths have a dredged depth of 7.3m. The NW and NE limits of the dredged area are marked by piles, from which lights are shown.

Although the harbor is dredged, shoaling occurs along the edges of Main Entrance Channel, in dredged areas within the harbor, and alongside the wharfs; mariners should obtain the latest depths from the Harbormaster.

Entering and leaving is governed by draft and stage of the tide. Vessels are berthed and unberthed at all stages of the flood, depending on draft. Vessels may enter, berth, unberth, or leave during the hours of darkness.

Vessels wishing to enter Port Nelson are not berthed in a strong wind. The maximum dimensions for entering Port Nelson are a length of 200m, a beam of beam 32.5m, a draft for cargo vessels of 9.2m, and a draft for tanker vessels of 7.9m. The above length and drafts may be exceeded only at the discretion of the harbormaster.

The main entrance is formed by South Mole, which projects about 0.1 mile NW from the N end of Haulashore Island, and a wall, about the same length on the NE side, parallel to and 0.2 mile NE of South Mole.

Main Wharf lies almost midway along the SE part of the dredged area. At Berth No. 4 and Berth No. 5, tankers up to 174m long, with drafts up to 7.9m, can be accommodated.

Main Wharf, which is T-shaped, has three berths on the outer face and two berths on the inner face. Berth No. 3, Berth No. 4, and Berth No. 5, which lie on the outer face of the NE and SW arms, have a total berthage length of 1,618m and depths ranging from 7.6 to 9.8m alongside. Berth No. 6 and Berth No. 7, which lie on the inner face of the SW arm, have a total berthage length of 519m, with a depth 6.1m alongside.

Brestwork Wharf, lying SW of Main Wharf, is comprised of Berth No. 8, Berth No. 9, Berth No. 10, and Berth No. 11, having a total berthage length of 180m, with alongside depths ranging from 1.5 to 4.3m.

McGlashen Quay, lying NE of Main Wharf, has two available berths, North and South, with a total berthage length of 335m and a depth of 9.8m alongside.

Kingsford Quay, lying NE of McGlashen Quay, is comprised of an outer and inner berth and has a total berthage length of 259m, with depths ranging from 6.4 to 9.14m alongside.

Brunt Quay, lying opposite McGlashen Quay, has a total berthage length of 137m and a dredged depth of 9.7m alongside.



Courtesy of Port Nelson

Nelson Harbor

Aspect

The main entrance to the harbor lies between the S end of a bank and the N edge of the island. A rubble mole projects about 0.1 mile NW from the NW end of Haulashore Island. Local magnetic anomalies may be experienced in the vicinity of Nelson.

Boulder Bank, which forms the NE side of the harbor, is narrow and nearly covered at HW. There are five patches on this bank, called islands. The Old Lighthouse, a white cement silo just E of Breastwork Wharf, and the Cathedral, standing on a hill about 1.5 miles SE of Main Entrance, are all conspicuous.

Range lights are shown for the approach to the main entrance. Two red obstruction lights are shown from a mast, 6.7m high, which stands on the mainland 0.7 mile SW of the rear

range light. Range lights are also shown for main entrance. Additional range lights are shown near the N end of Haulashore Island. These lights indicate the turning point for vessels leaving the harbor.

Pilotage

Pilotage is compulsory for vessels of 100 grt or over. Vessels should radio their ETA to the Harbormaster, Nelson at least 24 hours in advance, confirming 4 hours prior to arrival. If the vessel is to arrive on a weekend, pilotage should be ordered by 1500 on Friday. The pilot boat, painted orange, will meet vessels about 2 miles off the channel entrance.

A vessel, 115.8m in length and maximum draft of 5.8m, can berth or unberth at any time. Larger vessels berth and unberth on a rising tide, day or night, the time depending on draft, and are usually berthed bow out. Such vessels should arrive as early on a rising tide as possible. Vessels are not berthed in a strong wind.

Pilots board vessels about 3 miles seaward of the main entrance by high speed launch, 12m in length.

Signals

There is a radiotelephone at the harbor board office situated near the wharves. The call sign is Nelson Harbor Radio, frequency 2162 kHz, as well as VHF channels 12 and 16. A red flag by day or a red light at night, shown at the berth allocated, indicates the position abeam where the vessel's bridge be placed.

Anchorage

Vessels are not permitted to anchor inside the harbor without the authority of the harbormaster.

Offshore anchorage is available with Boulder Bank Disused Lighthouse, bearing 157°, distant 2.1 miles; quarantine anchorage may be taken with the lighthouse bearing 159° at the same distance. There is a depth of 11m at each of the anchorages.

Bolton Hole, about 0.4 mile W of the SE end of Haulashore Island, affords anchorage sheltered by the bar, and can be approached in a least depth of 2.4m.

In 1982, shoaling had occurred on the bank NW and W of Bolton Hole, and some parts of the bank dry.

There is anchorage, in a depth of about 12m, mud, with Port Nelson Landfall Light bearing 144°, distant 2.5 miles. Deep-draft vessels can anchor farther to seaward.

The quarantine anchorage lies about 0.1 mile SE of the above anchorage.

Directions

Mariners should be advised that the Boulder Bank blocks the lights of Port Nelson from small vessels.

Vessels approaching Port Nelson should steer for the anchorage, avoiding the SW side of Tasman Bay, off which banks project some 4 miles. A vessel should not head for Nelson Harbor in strong NW winds, but should instead seek shelter in Croisilles Harbor until it moderates.

Vessels should bring the outer range beacons in line bearing 164.7°; at night, keep in the white fixed sector of the front light. This above course should be maintained until the main entrance range lights are in line bearing 135.5°, which alignment leads through the main entrance. This alignment should be maintained until the inner range lights are in line bearing about 269°, astern. When Main Entrance front range light bears 221°, alter course NE towards the wharves.

Vessels of moderate size should enter the harbor at the end of the flood and let go an anchor under foot to assist in swing, weighing it before going alongside.

Caution

Great care should be exercised when berthing due to the uncertainty of the tidal currents, particularly at Main Wharf and off the N end of Brunt Quay. Vessels usually berth at Main Wharf stemming the tide, i.e. port side-to when the tide is flooding or starboard side-to when the tide is ebbing.

Trees on Haulashore Island partially obscure the rear leading light from the N.

D'Urville Island—North Shore

11.37 D'Urville Island's W coast forms part of the E shore of Tasman Bay, which is described in paragraph 11.33. D'Urville Island projects boldly from the coast and it is mountainous and wooded. The island is separated from the coast by French Pass, described in paragraph 11.34, and Current Basin, described in paragraph 11.33.

Port Hardy (40°45'S., 173°54'E.) is entered between Nile Head and Victory Islet, about 2 miles E. Fleet Rocks project S from Victory Islet almost to D'Urville Island. Nelson Monument stands nearly in the center of the entrance to Port Hardy; this high rock has deep passages on either side. Roughly 2.5 miles within the entrance the port separates into a Eas Arm and South Arm. Vessels with local knowledge can obtain anchorage, in a depth of 25.6m, in South Arm. In bad weather, a confused sea sets up at the entrance. The tidal currents set directly across the entrance, setting W with flood and E with the ebb. An abandoned submarine cable lies across the entrance to South Arm, extending about 1.2 miles SW from Castlehead, a promontory that lies about 2.5 miles S of Nelson monument. A submarine cable, marked at each end by a beacon, is laid between Castlehead and the shore SE.

Cape Stephens (40°42'S., 173°57'E.) is the N end of D'Urville Island and it is 184.4m high. Stephens Island lies about 2 miles NE of Cape Stephens and the W side of it is formed by a cliff, 243.8m high. In the vicinity N of Stephens Island, the tidal currents attain a rate of from 0.5 to 2.5 knots.

Stephens Island Passage lies between Cape Stephens and Stephens Island, and the area between is encumbered by rocks and dangers best shown on the chart. This area is extremely turbulent and liable to strong tide rips, eddies, and overfalls. During the E ebb tide current, turbulence occurs east of a line joining Cape Stephens and Stephens Island, while on the W flood tide current, turbulence occurs west of the line.

Stephens Island Passage should not be used except by small vessels with extensive local knowledge, as the area has not been closely surveyed and tidal currents are strong.

Directions.—Vessels bound into Cook Strait from the W side of South Island make landfall S of Cape Farewell, remaining about 3 miles offshore. From a location about 3 miles N of Cape Farewell, vessels should head for a position about 6 miles N of Bush End Light, allowing for tidal currents, then steer to pass a suitable distance N of Stephens Island. D'Urville Island and Stephens Island are visible from off the end of Farewell Spit and usually from a greater distance in clear weather.

Vessels bound for Tasman Corner should proceed as directed above and round Farewell Spit at a distance of about 3 miles. Then vessels should steer for Separation Point, bearing 219; when Mount Burnett bears 271°, steer for it on that bearing. When the islet off Puponga Point bears 354°, vessels should change course N and steer for it which leads to the anchorage.

11.38 The Rangitoto Islands (40°46'S., 173°59'E.) is comprised of three islands lying close together. The N of this group, Whakaterapapnui, is 224m high and bare. Tinui, the S island, is 151m high and is notable for scrub on its E side. Tinui Island's NE corner is almost joined to Puangiangi Island, close NE, by foul ground. A rock, which does not cover, lies close off the NE end of Tinui Island.

Mount Ears (40°48'S., 173°55'E.), 460m high, is a remarkable double-peaked mountain.

Rangitoto Road lies between Tinui Island and D'Urville Island; it affords a convenient anchorage during winds from the N through W to S. The anchorage is in the S part of the road, about 0.3 mile offshore. However, the depths here are rather great, from 21.9 to 25.6m close inshore. The anchorage is approached S of Tinui Island.

The tidal currents between D'Urville Island and Rangitoto Island attain rates of from 1 to 3 knots, setting N with the flood and S with the ebb.

Whareata Bay (40°49'S., 173°56'E.), with a shingle beach at its head, lies between Simpson Point and Halfway Point, which is 207.9m high. Small vessels with local knowledge can obtain excellent sheltered anchorage, in a depth of 18.3m.

Admiralty Bay (40°52'S., 173°57'E.) is entered between Bonne Point, the N tip of the D'Urville Peninsula, and Clay Point, about 3.5 miles ESE. A reef extends 0.2 mile ENE from Bonne Point.

Caution.—Jag Rocks are a group of rocks which lie about 4 miles E of Tinui, S of the Rangitoto Islands. The Trio Islets, a wildlife sanctuary, lie about 4.5 miles SW of Jag Rocks.

11.39 Stewart Island, 29.6m high, lies on a bank of foul ground about 3.5 miles W of Clay Point. A submerged rock lies about 0.2 mile N, and a 10.1m patch, 0.2 mile W of Stewart Island. Rabbit Island (Anatakupu Island), 26m high, lies about 1.5 miles WSW of Stewart Island.

Catherine Cove, with steep-to shores, is entered between the S end of the D'Urville Peninsula and a point roughly 1 mile W. A remarkable bare cone, 174m high, lies midway along the peninsula. The D'Urville Peninsula is joined to D'Urville Island by a low isthmus. Catherine Cove affords excellent anchorage for those vessels with local knowledge. The cove has depths of 16 to 40m; the holding ground being mud and shells.

Kapowai Harbor (Woodman's Homestead Cove), is located 1.2 miles WSW of Rabbit Island. A light is shown from a tower on the SW entrance point of the harbor. A wharf in the harbor affords the main transport link between D'Urville Island and the mainland.

Morrison's Cove (Ngamuka Bay), about 2 miles SW of Rabbit Island, affords good temporary anchorage to vessels with local knowledge N of the 3.7m bank lying E of Reef Point.

Elmslie Bay lies close SE of **Collinet Point** (40°55'S., 173°51'E.). There is a wharf, with depths of 2.1 to 4m along-side, at the head of the bay.

The inner section of Admiralty Bay is entered between **Clayface Point** (40°56'S., 173°51'E.) and Whangapoto Point, about 2.2 miles E. This part of Admiralty Bay has not been completely surveyed. There are general charted depths of 33 to 51m in this section.

A submarine telephone cable crosses the NW corner of Catherine Cove.

Pelorus Sound

11.40 Pelorus Sound (40°56'S., 174°04'E.) is entered between Paparoa and Culdaff Point, the NE end of Forsyth Island, about 3.2 miles SE. For the most part, except at the head of the main branch, the general aspect of the land surrounding Pelorus Sound is mountainous, rising to heights of 610 to 915m, and is covered with dense forests.

Pilotage is not compulsory in Pelorus Sound, but can be arranged with the harbormaster at Picton.

There are general depths in Pelorus Sound of 18.3 to 91.4m, decreasing at the heads of the various arms.

Winds—Weather.—The prevailing winds blow up the reaches from sea. Southeast winds, accompanied by heavy rains and violent gusts, are common and have been observed to last about 2 days.

Tides—Currents.—The tidal currents attain rates of 3 knots in the main reaches of Pelorus Sound, but they are hardly felt in the anchorages. There are strong tide rips around the Chetwode Islands and Sentinel Rock.

11.41 The Chetwode Islands (40°54'S., 174°05'E.) are comprised of two steep, rugged islands joined by a reef. These islands lie on the E side of Te Kakaho Channel, on the N side of entrance to Pelorus Sound. Nukuwaita, the SW island, has two remarkable sharp peaks, 231 and 234m high. The N side of the island is bare; the S side scrub-covered. A rock, with a depth of less than 1.8m, is reported to lie 0.2 mile NE of the W extremity of the island. Ninepin Rock lies close within the outer end of a reef, which projects about 0.5 mile SSW from the SW end of the island. The Haystack, 35.4m high, lies on the outer end of a spit of foul ground, about 1.7 miles ENE of Ninepin Rock, with Pelorus Rock, below-water, halfway between The Haystack and Nukuwaita. Hinemoa Rocks, with a least depth of 0.6m, lie about 1 mile W of the N end of Nukuwaita.

Te Kakaho (40°54'S., 174°06'E.), the NE island, steep, bare, and rugged has two summits, the N and higher of the two is 178.6m high. A drying reef extends 0.4 mile NE from the N end of the island. Sentinel Rock, 35m high, lies about 1.7 miles E of Te Kakaho Island.

Witts Rocks, with a swept depth of 9.1m, lies 8.5 miles ENE of the N end of Te Kakaho Island. McManaway Rock, with a swept depth of 9.1m, lies about 4 miles S of Witts Rock.

11.42 Outer part of Pelorus Sound.—Waitata Reach represents the outer part of Pelorus Sound between its entrance and Maud Island, 9.5 miles SW.

West Entry Point, located on the N side of Pelorus Sound, is long and narrow and comprised of clay.

Forsyth Island, 352m high in its S part, lies on the E side of the entrance to Pelorus Sound. The shores of the island are formed of low cliffs. Allen Strait separates the S end of the island from the mainland and it is unexamined. An overhead cable, with a vertical clearance of 54m, spans the channel, and a submarine cable is laid across the channel. Duffers Reef projects 0.7 mile WSW of the NW end of Forsyth Island. Several rocks lie on the reef; the outermost being 21m high.

Forsyth Bay, largely unexamined, is entered between Duffers Reef and East Entry Point. The NE corner of Forsyth Bay is known as Orchard Bay, and it has depths of 29 to 33m. Sunday Bay, which lies close S, has a small wharf.

Bird Island, 30m high, lies 1.2 miles WNW of Allen Strait. A depth of 8.8m exists 0.4 mile E of Bird Island. Sugar loaf Islet is 17.4m high, and it lies about 0.7 mile SE of Bird Island.

Ketu Bay, entered about 1.7 miles WSW of East Entry Point, has general depths of 11 to 33m.

Richmond Bay, the next indentation SW, is entered between Tapiapi and The Reef, about 1.5 miles SSW. Vessels with local knowledge can obtain anchorage at the head of the bay, in a depth of 26m.

Port Ligar, situated on the NW side of Waitata Reach, is entered between West Entry Point and Danger Point, 1.2 miles W. Cape Horn, located at the head of the bay, divides Te Kopi, a bay, E from Homestead Bay, SW.

Waihinu Bay is entered between Danger Point and Burnt Point. Foul ground projects about 0.4 mile S from Danger Point. Keep Clear Rock (Kainoki), awash and steep-to, lies about 0.2 mile S of the outer limit of foul ground. Waihinu Bay affords good anchorage for these vessels with local knowledge; the squalls in it not being as strongly felt as in those bays on either side.

Waitata Bay lies between Boat Rock, which is white, and Kaiaua, a yellow point, about 1 mile further SW. This bay is clear of dangers and has depths of 20 to 27m.

Hallam Cove and Fitzroy Bay, located at the NW end of Tawhitinui Reach, are entered between Sheep Point and Camel Point, 1 mile S. In the past, small vessels have found shelter here.

Tawhitinui Reach is entered on either side of Maud Island from Waitata Reach. Tennyson Inlet forms the SW arm of the reach, entered between Camel Point and Cregoe Point, 1.5 miles SE. A village, with a T-headed wharf, lies at the head of Brighton Bay, about 1.2 miles E of Cregoe Point.

Tawhitinui and Kauauroa Bays lie on the N side of Tawhitinui Reach, between Tapapa Point and **Whakamawahi Point** (41°03'S., 173°59'E.), about 2 miles SE. The former bay affords good anchorage.

Clova Bay lies in the S part of Pelorus Sound and is entered about 3 miles SE of Whakamawahi Point. Clova Bay is surrounded by land which is relatively bare. Manaroa, a village

with a wharf close W, lies at its head. A vessel, 49m long, has anchored in Clova Bay, in a depth of 12.8m, with ample swinging room.

Crail Bay, the S branch of the inlet of which Clova Bay is the SE branch, affords excellent anchorage.

Popoure Reach is entered between Tawero Point and **Opaniaputa Point** (41°05'S., 174°00'E.), about 1.5 miles SE. The Bays on the W side of Popoure Reach afford better anchorage than those on the E side. Popoure Reach extends about 7 miles SW. Hikapu Reach projects about 5 miles S from the S end of Popoure Reach.

Kenepuru Sound projects 12 miles ENE from the SE side of Hikapu Reach. The central part of the Sound is known as Conniston Water. Public wharfs, with road access, are situated in Te Mahia and Portage Bays, on the S side of Kenepuru Sound and in Waitaria Bay, on the N side. There is a boat channel, with a depth of 1.5m at HW, between the mainland and an island, 158m high N of Portage Bay.

Guards Bay

11.43 Guards Bay (40°57'S., 174°08'E.) is entered between Culdaff Point and Alligator Head, about 4 miles ESE; the bay affords shelter in all but NW winds. Close within the entrance the bay is a bank, with depths of 12.8 to 18.3m.

Forsyth Island forms the W side of Guards Bay. Lord Ashley Bay is the first indentation SSE of Culdaff Point. Yellow Point, 1.5 miles S of Culdaff Point, divides Lord Ashley Bay N from Annie Bay. Tawaroa Point, a cliffy projection, extends from the S part of Guards Bay forming the E entrance of Anakoha Bay and the W entrance point of Titirangi Bay. A submarine cable is laid across Anakoha Bay, 0.5 mile from the head. Titirangi Bay has a sandy beach at its head, with a rocky outcrop in the center of the beach.

Motungarara Island (Titi Island) (40°57'S., 174°10'E.), 105m high, lies in the entrance to Guards Bay, about 1.2 miles NNW of Alligator Head. A reef of rocks, which dries 1.8m, projects 0.3 mile ESE from its E end.

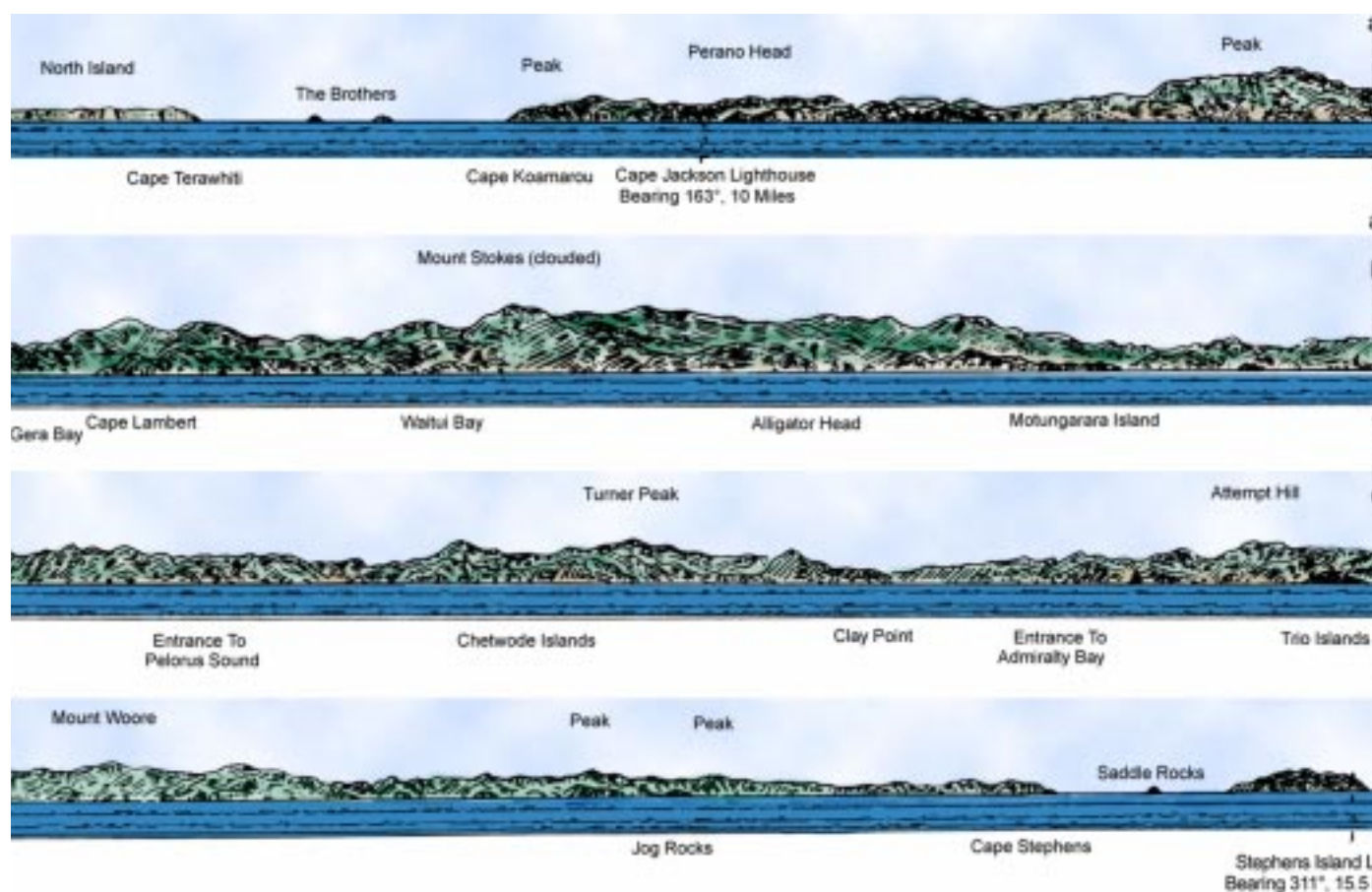
Anchorage.—Anakoha Bay and Titirangi Bay afford good anchorage, in depths of 13.7 to 27.4m. There is anchorage on the W part of the 13.7 to 18.3m bank, under the E side of Forsyth Island. During SE winds, anchorage may be found on the S end of the above bank, off the E entrance point of Titirangi Bay, in a depth of 16.5m.

11.44 Port Gore (41°02'S., 174°14'E.) is entered between Cape Lambert and Cape Jackson, about 3.5 miles E. The land surrounding Port Gore is mostly high, covered with scattered scrub. There are general depths in Port Gore ranging from 15.6 to 33m.

Jackson Head Rock lies about 0.3 mile and Walker Rock about 0.9 mile, NE of Cape Jackson. McManaway Rock, a pinnacle with a swept depth of 9.1m, lies about 3.5 miles N of Cape Jackson.

Tides—Currents.—Tidal currents around Cape Jackson are rapid and there is little slack water. A strong eddy is formed during the flood on the W side of the Cape.

Anchorage.—There is anchorage, in a depth of 20.1m, gray mud, about 0.5 mile offshore on the E side of Port Gore. Good shelter may be found in the SE corner of Port Gore, in a depth of



West side of Cook Strait, in four parts

27.4m, good holding ground. Melville Cove, in the SW portion of Port Gore, affords anchorage, in a depth of 22m, about 0.2 mile from its head. Melville Cove affords better shelter.

Caution.—A dangerous wreck, with a depth of 11.2m, lies about 0.6 mile SE of the E entrance point of Melville Cove.

The area of Port Gore, bounded by **Cape Lambert** (40°59.5'S., 174°13.5'E.) to Cape Jackson (40°59.5'S., 174°19.0'E.), is prohibited to all navigation. Vessels intending to navigate within the waters of Port Gore should apply to the Marlborough Harbor Board for a permit.

11.45 Queen Charlotte Sound, known locally as Totaranui, lies between Cape Jackson and Cape Koamaru, 6.5 miles SSE. This extensive sound is pocked with many coves and bays, many of which afford secure anchorage.

The aspect of the land on either side of the sound is high and mostly covered with isolated scrub, rising on the N side to heights from 457 to 610m. On the S side of the Sound, Arapawa Island rises to 559m near its SE end.

The town and harbor of Picton, which are described paragraph 11.50, lie about 4 miles E of the head of Queen Charlotte Sound.

Caution.—Mariners are advised that Queen Charlotte Sound is subject to heavy gusts off the high land and from the

mountain gullies during strong winds in Cook Strait. These squalls give little or no warning and caution is necessary.

11.46 Cook Rock (41°03'S., 174°26'E.) lies about 5.2 miles SE by E of Cape Jackson, and it is awash. There are usually tide rips on and around Cook Rock; in strong winds it breaks before LW. When visible, Cook Rock resembles a whales back. A rocky patch, with depths of 11.8 to 17.7m, lies about 0.7 mile SSW of Cook Rock.

The Brothers are comprised of two scrub-covered islands lying about 2.7 miles ESE of Cape Koamaru, and they should be given a berth of about 1 mile. There is no passage between The Brothers. The channel between the S island of this group and the shore S of Cape Koamaru, while deep, is not recommended.

Awash Rock, which is steep-to, lies about 3.2 miles SSW of The Brothers.

Tides—Currents.—Currents in the general locale of The Brothers are strong with heavy tide rips. Off the entrance to Queen Charlotte Sound, the tidal currents set across the entrance with considerable strength on both entrance points. Within the sound, currents attain rates from 0.5 knot to 1 knot,

except at the W entrance to Tory Channel, where they attain rates of from 1 to 3 knots.

The flood current, which enters Queen Charlotte Sound via Tory Channel, flows out towards Long Island, about 4.5 miles within the entrance, until it joins the main flood or N current of the Sound. The rate of the current between Motuara Island and Long Island is 0.5 to 1.5 knots. In the sound W of the W entrance to Tory Channel, tidal currents are weak.

Queen Charlotte Sound

11.47 North side.—Kempe Point (41°02'S., 174°19'E.) lies about 2.5 miles SSW of Cape Jackson and represents the N entrance point of Anakatata Bay. At the head of this bay is a wharf. Kaikanohi, the S entrance of this bay, is formed by yellow cliffs, 18.3m high.

Ships Cove (Meretoto) is entered about 4.2 miles SSW of Kempes Point, between Te Ahitaore and Ekiera. Cooks Monument stands near a public wharf at the head of Ships Cove. The shores of this cove are rocky and steep-to.

Bare Ridge, on the S side of Ships Cove, has a bare yellow summit, 403m high.

While Ships Cove has more attractive depths than other locations in the sound, it is not as sheltered as other places further in and it is more prone to heavy squalls and gusts during strong winds from the high land.

Anchorage may be found in Ships Cove, subject to the above, in a depth of 18.3m, about 0.4 mile E of Cooks Monument.

Motuara Island, which fronts Ships Cove, has two summits and it is bush-covered. Cooks Cairn stands on the S summit. A submerged rock lies about 0.5 mile N of the N end of the island. The pilot ground lies about 0.5 mile E of the S tip of Motuara Island.

During SE gales, good anchorage may be found, in a depth of 13.7m, mud, 0.7 mile E of the S end of Motuara.

Endeavour Inlet is entered between Scott Point and Edgecombe Point, 1.2 miles SW. The NW arm of Endeavour Inlet is known as Big Bay.

Anchorage has been obtained in Big Bay, by a vessel 49m long, in a depth of 22m, but the vessels stern swung into a depth of 5.2m.

Dryden Bay (41°10'S., 174°12'E.) lies midway between Edgecombe Point and Kurakura Point, 1.7 miles S.

The Bay of Many Coves (Miritu) lies between Snake Point, which is located about 2 miles SW of Kurakura Point, and Bull Head, 0.7 mile SW. Snake Point is the end of a pine-covered isthmus.

Ruakaka Bay lies between West Head, lying 0.7 mile WSW of Bull Head, and Ngatakore Point, 1 mile W, and is deep except for a dangerous reef which extends 90m from the W shore, 1 mile within the entrance. Luke Rock, with a depth of 0.6m, lies in the entrance to Ruakaka Bay.

Tahuahua Bay (Blackwood Bay) is the next indentation W of Ruakaka Bay. Perano Shoal, with a depth of 4.6m, lies in the entrance to this bay.

The remainder of the N shore of the sound is indented by six main bays; these are best seen on the chart.

11.48 South side.—Cape Koamaru (41°05'S., 174°23'E.), which rises to 146m, is the N end of Arapawa Island and the E entrance point of Queen Charlotte Sound. White Rocks, lying 1.2 miles NW by W of the Cape, consist of a ridge of peaked rocks with a channel on either side. Stella Rock, with a depth of 1.8m, lies 0.5 mile W of Cape Koamaru. A steep-to rock, with a depth of 11m, lies 0.3 mile N of Stella Rock.

The Twins are comprised of two rocks, 17.7m, surrounded by kelp.

Caution.—The channel between White Rocks and Cape Koamaru should not be used without local knowledge.

Motungarara Island, 41m high, lies 0.5 mile S of The Twins. Submerged rocks extend NE and SE from the SE end of the island. A depth of 4m lies close off the NW end of the island, and the island is surrounded by kelp.

Long Island, 151m high in its central part, is steep and bush-covered. Kokomohua Island lies close NE of the NE end of Long Island and it is almost connected to it by rocks. A spit extends 0.3 mile NE from the N end of Kokomohua Island. A 13.4m patch lies 0.3 mile ENE from the end of the spit. The passage between the E shore of Long Island and the NW shore of Arapawa Island is nearly 1 mile wide, with depths ranging from 21.9 to 51.2m over a mud bottom.

East Bay, which indents the NW shore of Arapawa Island, lies between Clark Point and the NW end of Pickersgill Island, which is scrub-covered and 185.6m high. A reef projects 0.2 mile NW from the NW end of the island.

Blumine Island (Oruawairua), 289m high at its center, lies with its NE end about 1.2 miles W of the NW end of Pickersgill Island. Patten Passage separates the island from the shore SE; it has a depth of 27.4m in the fairway.

11.49 Hawes Rock (41°12'S., 174°13'E.), with a depth of 3.3m, lies about 0.3 mile SW from the SW end of Blumine Island, with foul ground between. A dangerous rock lies close NE of Hawes Rock.

Directions.—Queen Charlotte Sound may be approached on either side of Cook Rock, but the 11.9m rock SSW of it should be avoided. Cape Jackson, bearing less than 286°, or Alligator Head, open N of that Cape, leads N of Cook Rock.

The Brothers Light, bearing more than 180°, leads E and White Rocks, well open E of Long Island, bearing 229°, leads 0.5 mile NW of Cook Rock. There is a clear channel, about 2 miles wide, S of the 12m rock. A vessel proceeding by this passage, if from the S, should keep The Brothers Light bearing less than 354° until she has passed Awash Rock. Vessels should pass at least 1 mile E of The Brothers, then N of Cape Koamaru, N and W of White Rocks and on either side of Long Island. Vessels without local knowledge should not pass E of Long Island.

Dieffenbach Point lies on the W side of the W entrance to Tory Channel, about 3.5 miles SW of Hawes Rock.

Picton Harbor (41°17'S., 174°00'E.)

World Port Index No. 55300

11.50 Picton Harbor lies at the head of Queen Charlotte Sound; it is the chief port of the Marlborough District. There are two approaches to Picton Harbor, one by entering Queen Charlotte Sound and the other via Tory Channel.

Port Marlborough
<http://www.portmarlborough.co.nz>

Tides—Currents.—The neap rise is 0.6m; the spring rise 1.4m.

Off the NE entrance to Queen Charlotte Sound the tidal currents set across the entrance with considerable strength. In the sound, tidal currents attain rates of from 0.5 to 1 knot, except at the W entrance of Tory Channel, where they attain rates of from 1 to 3 knots. The flood current, which enters the sound by Tory Channel, flows out towards Long Island, where it joins the main N flood current through Cook Strait. The rate of currents between Motuara and Long Island is 0.5 to 1.5 knots. In the Sound W of the W entrance to Tory Channel, the tidal currents are weak.

At the E entrance to Tory Channel, the tidal currents attain rates from 5 to 7 knots; about 1.5 miles within the entrance the tidal currents attain rates from 2 to 4 knots; and in the remainder of Tory Channel the tidal currents attain rates from 1 to 3 knots.

During periods of spring tides, low-powered vessels without local knowledge should avoid using the Tory Channel entrance.

During strong winds in Cook Strait, Queen Charlotte Sound is subject to heavy gusts of wind which sweep off the high land and out of the mountain gullies; giving little or no warning of their approach.

Depths—Limitations.—Vessels up to a maximum draft of 18.3m can enter Queen Charlotte Sound; there are no length or beam restrictions.

Vessels up to a maximum length of 201m, depending on the vessel's draft, can enter Picton. the maximum draft restrictions are 11m aft and 8 to 10m forward, depending on the vessel's length. There are no beam restrictions.

All vessels may enter, berth, unberth, or leave at anytime, subject to prior arrangement with the harbormaster.

Waitohi Wharf, a ferro-concrete wharf, lies at the SW side of the port; it is 240m long, with 226m of berthage on each side. There are reported depths alongside from 8 to 11m.

Ferry Berth No. 1 and Ferry Berth No.2 lie just S of the Waitohi Wharf. Ferry Berth No. 1 can accommodate vessels with a maximum length of 120m and a maximum draft of 7.5m. Ferry Berth No. 2 can accommodate vessels with a maximum length of 160m and a maximum draft of 7.5m. These berths serve both road and rail traffic and make up the Inter-island Ferry Terminal.

The Waimahara Wharf is situated adjacent to Picton on the W shore of Shakespeare Bay. The wharf is 200m in length and has a depth of 16m alongside. Lumber and bulk products are

**Picton Ferry Berth**

Aspect.—Picton Harbor lies on the E side of a double bay divided by wooded steep-sided promontory whose N end is Kaipupu Point. The W indentation is known as Shakespeare Bay. The W shore of the bay is formed by steep cliffs rising to a wooded ridge, 184m high. Situated at the neck of the promontory, dividing the bay, is a chimney and freezing works.

Mabel Island (41°16'S., 174°01'E.), 30m high, fronts the wooded promontory and is marked by a light on its S end. A red light is shown from Waitohi Wharf. This light, bearing 113°, leads midway between Mabel Island and the opposite shore. Due to colored background lights, vessels approaching from the N will encounter difficulty in distinguishing vessels moving in the wharf area.

Pilotage.—Pilotage is compulsory for all vessels over 500 grt within the entire Queen Charlotte Sound and Tory Sound. Pilots board 0.5 mile E of Motuara Island Light.

Application for a pilot must be made 24 hours and 4 hours prior to the ETA. Vessels arriving at night or during the weekend should apply for a pilot no later than 1530 on the last previous working day.

Regulations.—The following regulations apply to vessels greater than 500 grt.

1. During the hours of darkness vessels should not pass each other S of 41°16'S.
2. Vessels entering or leaving Picton Harbor are to proceed at a speed not exceeding 12 knots while the vessel is S of Mabel Island Light.
3. Vessels may not berth or unberth at Waitohi Wharf when wind speeds in excess of 30 knots are being experienced without the permission of the harbormaster.

Due to the heavy ferry traffic in Tory Channel, all foreign vessels are advised to use the N entrance to Queen Charlotte Sound.

Signals.—The harbor may be contacted via VHF channel 19, call sign Picton Harbor Radio. All vessels entering or departing the port are required to advise Picton Harbor Radio of their movements.

Anchorage.—Except during strong NW winds, there is good anchorage N of Mabel Island, in 29.3m, mud, for vessels of all sizes. The quarantine anchorage lies W of Mabel Island.

Anchorage is prohibited in the fairway NE of Mabel Island, and in that area of Picton Harbor E and S of Mabel Island.

Tory Channel and Approaches

11.51 Perano Head (41°12'S., 174°22'E.) represents the SE end of Arapawa Island and it is a remarkable, bold, rugged cliff that rises about 0.7 mile N to a bush-covered mountain, 559m high. Ruakawa Rock, steep-to and bush-covered, is 61m high and connected to the head N by a reef.

The shore N of Perano Head is cliff-faced and steep-to. Between Perano Head and East Head, the E entrance point of the E entrance to Tory Strait, about 2.2 miles WSW, the shore forms a cliff-faced bay.

Tory Channel is entered between East Head and West Head through an entrance about 0.2 mile wide at its narrowest part. Tory Channel, from its entrance, runs about 3.5 miles SW then 4.5 miles W to its junction with Queen Charlotte Sound.

Regulations.—The use of a pilot in Tory Channel is compulsory and requests should be made at least 4 hours in advance. Vessels arriving at night or over a weekend should request a pilot before 1530 on the previous workday. Pilots board vessels off the E entrance to Tory Channel about 1 mile SE of West Head.

In addition to the requirements of the above, the navigational instructions described below apply to vessels of more than 250 grt within the waters of Queen Charlotte Sound and Tory Channel.

Vessels may only use Tory Channel with the permission of the harbormaster. This permission is dependent on traffic in the channel and weather conditions.

New Zealand Railways operates a regular rail ferry service between Wellington and Picton, and rail ferry vessels may be encountered in Tory Channel, at any time. Caution should be exercised at all times and in particular while navigating Tory Channel and Tory Channel E entrance.

Ten minutes before arriving at the E entrance to Tory Channel, all vessels, whether inbound or outbound, are required to transmit a message addressed to "All Ships" advising of the vessel's approaching transit through the entrance. This message must be transmitted on VHF channel 16.

Note.—VHF channel 63 is the local repeater station and is most likely to be monitored by small craft.

Picton Harbor Radio will keep all vessels advised of any known movements of other vessels.

All vessels entering or leaving Tory Channel, whether in sight of one another or not, are required to establish radio contact with any other vessel which is likely to be approaching the E entrance at approximately the same time.

Where it is established that two vessels are likely to pass each other in the vicinity of Tory Channel E entrance, the outbound vessel shall have priority and the inbound vessel shall wait clear of the entrance until the outbound vessel is clear. This requirement shall not apply where the master of the outbound vessel has advised the inbound vessel to proceed inward. Under such conditions, the outbound vessel shall not proceed seaward of a line drawn in a 320° direction from

Scraggy Point Light, until the inbound vessel has cleared the entrance.

Under normal operating circumstances, the following are the minimum distances which vessels are required to maintain off the points of land designated:

Point of land	Inbound	Outbound
Te Uira-Kapapa Point	0.1 mile	0.2 mile
Arrowsmith Point	0.2 mile	0.1 mile
Ruaomoko Point	0.1 mile	0.2 mile
Dieffenbach Point	0.4 mile	0.2 mile
Double Point	0.4 mile	0.2 mile
The Snout.	0.3 mile	0.1 mile
Picton Point	0.3 mile	0.1 mile

Caution.—Failure to receive any radio communication should not be construed by any vessel as confirmation that the E entrance to Tory Channel is clear and the entrance should be approached with due caution at all times.

At the E entrance to Tory Channel, the tidal currents attain a rate of 5 to 7 knots; at about 1.5 miles within the entrance, the tidal currents attain a rate of 2 to 4 knots; in the remainder of the channel, the tidal currents attain a rate of 1 to 3 knots. Vessels without local knowledge which are low-powered should not use the E entrance of Tory Channel at springs.

11.52 Okukari Bay (41°12'S., 174°19'E.) is entered about 0.7 mile WNW of East Head, and it is too open for adequate anchorage. An old whaling station stands 0.4 mile WSW of the W entrance point of the Bay.

White Rocks (41°13'S., 174°17'E.), which lie above water, lie about 0.7 mile WSW of the W entrance of Okukari Bay. White Rocks separate Te Awaitei Bay from Jacksons Bay.

Vessels with local knowledge can obtain anchorage, in a depth of 12.8m, E of White Rocks in Te Awaitei Bay.

Oyster Bay (41°15'S., 174°15'E.) is entered between Motukina Point and Tiu Point, 0.4 mile W. Vessels with local knowledge can find sheltered anchorage well within this bay, in a depth of 10.1m, mud bottom, although space is restricted by marine farms.

An unnamed bay lies on the N side of Tory Channel; it is the largest indentation on the N side. A shoal, with a depth of 2.7m, blocks most of the center of this bay. Ngaruru Bay indents the W side of this bay.

An overhead power cable, with a vertical clearance of 89m, spans Tory Channel just E of Arrowsmith Point. Reports are that the cable generates a false radar target which can be taken for a vessel underway.

Anapua Bay, the largest indentation of the S side of Tory Channel, lies between Katoa Point and a point nearly 0.5 mile W. Opua Bay and Missionary Bay lie at the head of Anapua Bay. A shoal, comprised of mud and shells, with a depth 9.4m, lies centered close within the entrance.

Directions.—From the SE side of Cook Strait, vessels bound for the E entrance of Tory Channel should head for the 485m high summit of Arapawa Island. The aspect of the land

off this approach, S of the entrance, appears as a chalky cliff, gradually sloping down to West Head. The land N of the entrance is higher, but less steep.

Vessels with local knowledge, bound for Picton through Tory Channel with the W current, should head for the range lights shown from the W shore of Okukari Bay. However, against the E current, vessels should keep to the S side to avoid its strength, until abeam Jackson Bay. After passing Jackson Bay, the full force of the current will be on the port bow, unless a course change is made so as to meet it end on.

A vessel outbound through Tory Channel, should when N of Scraggy Point, steer for the directional light on East Head, bearing 093°, at night, keeping within the white sector. The vessel should then bring the leading lights in Okukari Bay into line and steer SE through the entrance, between West Head and East Head on the alignment of the lights, astern, bearing 311.7°.

Caution.—Low-powered vessels without local knowledge should not use the E entrance of Troy Channel at spring tides.

11.53 Cloudy Bay is entered between Rununder Point and White Bluffs, 14.5 miles SSW. The shore N from Rununder Point is bare, rugged, cliffy and indented; rocks lie up to 0.5 mile off the points.

Fighting Bay is entered about 1.5 miles WSW of Rununder Point. A village lies behind a small beach in a break in the cliffs at the head of the bay. The shore between West Head and Robertson Point, the E entrance point of Port Underwood, should not be approached closer than 1 mile.

A cable area where anchoring and fishing are prohibited lies off Fighting Bay; it is best seen on the chart.

Cloudy Bay affords good anchorage out of the tidal currents about 2 miles offshore, in general depths of 12.5 to 16.5m.

The land, with its adjacent mountain ranges, gives such protection that light winds, smooth water, and clear weather are usual in the bay, while heavy gales from NW to S are blowing in the middle and on the E shores of the strait.

This anchorage is of great benefit to vessels unable in S gales or thick weather to make Pencarrow Head, for Wellington, or for those being in ballast and light, who consider it imprudent to run down on a lee shore.

Generally, the weather improves W of the line joining Cape Campbell and Tory Channel and as the anchorage is approached.

Cape Campbell Light is rarely obscured by thick weather at night; White Bluffs can nearly always be seen some miles off.

Caution.—Mariners are advised that deviations of the compass may be experienced in shallow waters in close proximity to the submarine power cables.

11.54 Port Underwood (41°20'S., 174°08'E.), an inlet entered between Robertson Point and an unnamed point about 1.5 miles WSW, is a good and spacious harbor usable in any weather. This inlet is separated into two arms by an isthmus with each arm forming a separate and well-sheltered harbor. Additionally, the inlet is indented by several coves affording sheltered anchorage. The land around the port is mountainous.

Coombe Rocks, above water, project about 0.2 mile off a point 1.7 miles E of Robertson Point. Tomikoko Rocks lie about 0.7 mile E from Robertson Point.

Pipi Bay is entered about 1 mile NE of Robertson Point and Horahora-Kakahu Islet lies close off the N entrance point of this bay to which it is connected to by a reef of above-water rocks.

Anchorage.—Anchorage, in a depth of 11.6m, may be found in Pipi Bay.

The Knobbys, a group of above-water rocks, lie about 3.2 miles NE of Robertson Point and they extend about 0.3 mile W from the N entrance of Tumbledown Bay.

Tumbledown Bay affords anchorage, in depths of 14.6 to 16.8m.

Hakana Bay lies in the NE pocket of the inlet; it affords anchorage, in a depth of about 10.4m.

Oyster Bay is the largest indentation on the W side of the inlet; it affords anchorage, in depths of 7 to 9.1m.

11.55 White Bluffs (41°33'S., 174°09'E.), which are remarkable and white-faced, rise boldly from the sea and are 267m high and bush-covered. Reefs project from White Bluffs. The town of Blenheim, where there is a radio mast and several aero lights, is situated about 9.5 miles WNW of White Bluffs.

A good anchorage may be found, in about 27m, with White Bluffs bearing 155°, at a distance of 5 miles.

The Awatere River empties out into the sea about 3 miles SSE of White Bluffs; it has a depth of 1.5m at high water over the bar.

Clifford Bay lies between the entrance to the Awatere River and Cape Campbell, 9 miles SE. The shore of the N part of the bay is faced with cliffs. Abandoned submarine cables exist in the N part of Clifford Bay.

Anchorage may be found in the S part of Clifford Bay during S winds in two locations lying 1 mile and 30 miles WNW of Cape Campbell, sand, in depths of 7.3m and 6.7m, respectively.

Cape Campbell (41°44'S., 174°16'E.) represents the SW entrance point of Cook Strait; it lies about 47 miles WSW of Cape Palliser. Cape Campbell and the shore in its proximity should not be approached closer than 3 miles, as it is encumbered by numerous reefs and rocks, many of which dry, lying up to 2 miles offshore. From the N, two yellowish peaked cliffs rise steeply to Mount Tako, a rounded summit 195.1m high, lying about 1.2 miles SW of the cape. Vessels bound for Wellington from the S should take departure from Cape Campbell.